SD
143
.Z55
1976

United States
Department of
Agriculture

**Forest
Service**

**State and
Private Forestry**

A Historical Summary of State and Private Forestry in the U.S. Forest Service

A HISTORICAL SUMMARY

OF

STATE AND PRIVATE FORESTRY

IN THE

U.S. FOREST SERVICE

Eliot Zimmerman

1976

National FS Library
USDA Forest Service

JUL 24 2009

240 W Prospect Rd
Fort Collins CO 80526

TABLE OF CONTENTS

		Page
	Introduction	
I	America's First Attempts to Conserve and Protect	1
II	Pinchot Launches Forest Management in America	10
III	The Weeks Law: Federal-State Cooperation Develops	19
IV	The Clarke-McNary Act: Cooperative Forestry Expands	33
V	Emergency Programs During the Great Depression	47
VI	The Cooperative Forest Management Act and Additional Advances	62
VII	Retrospect and A Look to the Future	86

APPENDICES

A-1	U.S. Forest Service Organization: Chief, Deputy Chief, State and Private Forestry, Division Directors, State and Private Forestry, by Selected Years.	91
A-2	U.S. Forest Service Organization: Heads of State and Private Forestry by Regions and Area for Selected Years.	92
A-3	Cooperative Program Financing for Designated Years.	95
A-4	Map of the United States Indicating Year of First Establishment of Administrative Commission, Board, or Department of Forestry in Each State.	96
A-5	Samples of Cooperative Agreement Between the U.S. Forest Service and the States, Territories and Possessions.	97
A-6	Laws Pertaining to State and Private Forestry.	107

TABLE
(Continued)

Page

Table 1. Area Shift of Lumber Production in the United States 5

Table 2. Trend of Total Lumber Production in the U.S., 1868-1932 5

Table 3. First Establishment of State Administrative Commission, Board, or Department of Forestry 8

Table 4. First State Forestry Appointments Authorized by State Law 20

Table 5. First Authorized Cooperation of the States with the Bureau of Forestry, U.S.D.A. or the U.S. Forest Service in Forestry Programs 28

TABLE OF CONTENTS

FIGURES

Figure 1. Area of Private Commercial Forest Land by Ownership Size Class 117

Figure 2. Number of Owners of Private Commercial Forest Land by Size Classes 118

CHARTS

Forest Fire Control Under Weeks Law, Cost of Protection 35

Forest Fire Control Under Clarke-McNary, Sec. 2, Cost of Protection 48

Total Acres of State and Private Land Protected Under the Clarke-McNary Cooperative Fire Control Program 71

Area Protected and Total Area Burned on Protected and Unprotected Land in the United States, 1915-1975 119

INTRODUCTION

There was little interest in state or private forestry in the United States until after the Civil War. The actions taken then by the states to protect their forests were of little consequence, but when the general public apathy toward forestry in the United States at that time is considered, these efforts were remarkable. In 1876, the Federal government took positive action to bring attention to the need for proper management of our nation's forests. For another ten years, the Federal forestry organization was primarily a bureau of information.

George W. Vanderbilt was the first of the large forest owners to practice systematic forestry under regular working plans in the United States. Under the supervision of Gifford Pinchot, America's first professional forester, work was started on Biltmore Forest in 1891. Seven years later, when Pinchot was appointed chief of the old Division of Forestry in the U.S. Department of Agriculture, he developed an on-the-ground practical forest management program by providing technical assistance to private owners as he did as a consulting forester after leaving Biltmore.

Thus, forestry began in the United States through legislative action in the states and on-the-ground management of private forests, both with, and without, Federal government assistance. Upon the passage of the Weeks Law in 1911, cooperation between the Federal government and the states was formalized: a partnership that has grown through the years with the enactment of further Federal and state legislation which expanded the cooperative programs.

This historical summary of state and private forestry is based, to a large extent, on the partnership in cooperative programs between the U.S. Forest Service and state forestry agencies. There is no attempt to provide a detailed history of each of the cooperative programs, nor is there any intent to elaborate on cooperative programs carried on between the U.S. Forest Service and other government agencies.

To simplify the telling and to keep the historical summary within reasonable bounds, no attempt has been made to provide details on the history of industrial forestry or on cooperative forestry programs carried on by the Extension Service, the Soil Conservation Service, or the Agricultural Stabilization and Conservation Service.

Obviously, the cooperative history of state and private forestry is closely related to the cooperative programs in forest fire protection and forest management on non-Federal lands. There is no intent to slight the highly important cooperative programs in forest pest control, flood prevention and watershed protection, urban forestry, and environmental programs. These are no less a part of the Forest Service state and private activities, but their association is more recent and therefore provides less historical background.

Finally, I wish to acknowledge the help of those who reviewed the first draft, and to those who provided guidance and counsel. Specifically, I am indebted to Richard E. McArdle, Arthur R. Spillers, Henry Clepper, Philip L. Thornton, Frank J. Harmon, Thomas B. Borden, Osal B. Capps, Eugene L. Brunk and Susanne Brendel.

In addition, acknowledgement is made of comments on the review draft by E. M. Bacon, Willis C. Branch, Thomas H. Burgess, Samuel T. Dana, James N. Diehl, Carl L. Hawkes, Edward H. Marshall, Earl S. Peirce, Harold Pinkett, and Charles E. Randall.

Chapter I

America's First Attempts To Conserve And Protect

When Europeans first came to America, they found an untamed continent--a boundless expanse of primeval forests. To the early farmers and homesteaders, the forest was an obstacle to be overcome. They sought only to clear the land to raise crops needed to sustain life; they cut the trees to build their homes and burned to clear the land only to discover, in many instances, that the land that supported trees would not long support farm crops.

By the end of the Civil War, the great forests of the Northeast had been heavily cut and the timbermen were moving West and South leaving vast areas of devastation behind them. Slash fires frequently followed logging and there were virtually no attempts to control the holocausts that swept over the land, again and again.

With the spread of forest destruction came a few faint voices raised in protest. Farsighted individuals began to speak out against this destruction of a great natural resource. The public first, then lawmakers began to listen. In the late 1860s, a few states took preliminary action to protect their forests, but these were little more than isolated attacks on an enemy that was menacing the forests of many states.

A Wisconsin Act of 1867 authorized the state agricultural and horticultural societies to appoint a committee of three to make an investigation and report to the next session of the legislature as to whether the forests of that state were being destroyed as rapidly as had been claimed, what effect the destruction of forests had upon the climate, whether the state should attempt to control the management of private forests, whether a convenient substitute for wood might be found in the state, and what efforts the state should make to preserve the forests and encourage the extension of forest areas. Following the report of this committee, the legislature passed the Act of March 4, 1868 which provided a tax exemption and bounties for the preservation or the planting of belts of trees.

In January of 1869, the State Board of Agriculture of the state of Maine appointed a committee to present to the legislature the necessity for the preservation and production of forest trees. The Act of 1872 provided exemption of forest plantations from taxation. Other midwestern legislatures passed new laws to encourage tree planting during this period between 1867 and 1872.

In the fall of 1871, extreme drought and wide-spread logging activities brought about serious danger of forest fires in the Lake States. The disastrous Peshtigo fire in Wisconsin that year was one of the most calamitous forest fires in the history of the nation. The town of Peshtigo and several other settlements were totally destroyed, resulting in the loss of 1500 lives. Over a million acres were devastated in this single fire. About the same time, fires in logged over areas of northern Michigan burned over two million acres.

The historic fact remains, that prior to 1885 there was no national policy on forestry, no practice of forestry on private or public lands, no professional American foresters, and no American colleges providing forestry training. When the practice of forestry began to unfold in the United States, however, it differed from the growth of forestry in European countries. Forestry in the United States did not begin on Federal lands, but in the states and on private lands.

> "The Nation had never shown any substantial evidence in forest administration, but the states had given the subject a very considerable amount of attention. Their record was, in fact, striking." (2)

One of the most effective means of arousing interest in the value of trees was first used by Nebraska in 1872. Arbor Day was designated and the people of Nebraska were urged to plant trees on this day. Several other states and territories passed laws to encourage tree planting by providing tax exemptions or bounties.

> "Although these laws generally failed to yield the results desired, they were both sensible and practical, considering the times and conditions. States having thousands of square miles of treeless prairies or arid areas tried to encourage tree planting, because legislators realized the handicaps to agriculture in a country lacking supplies of wood for fuel, fenceposts, homes, barns, implements and other necessities." (3)

In 1873, the first Timber Culture Act granted a homesteader the ownership of 160 acres of land in the Great Plains if he would agree to plant one-fourth of the homestead (40 acres) to trees, not more than 12 feet apart. Although the homesteader agreed to keep the trees in a healthy growing condition for 10 years, few complied with these requirements and the tree planting requirement was finally eliminated. The records claim 563,000 acres of tree plantations were established under this Act in the Dakotas, Nebraska and Kansas.

Behind the increased interest in trees and forestry was the influence of newly organized forestry associations. With the organization of the American Forestry Association in 1875 a peoples' crusade was launched to prevent further destruction of the nation's forest resources.

Minnesota became the first state to have a state forestry association in 1876. With the help of AFA, three more States established forestry associations in 1885: New York, Colorado and Ohio. In Illinois and Texas, forestry associations were organized in 1888. The Pennsylvania Forestry Association, founded in 1886, remains the oldest state association still active. Other state associations followed; Wisconsin in 1893, New Jersey in 1894, Connecticut Forest and Park Association in 1895, North Carolina, Oregon and Washington in 1897 and the Massachusetts Forest and Park Association in 1898. All of these private organizations conducted educational campaigns to generate public support. In 1889, the AFA and the Pennsylvania Forestry Association held a joint conference in Philadelphia. The conference called for the creation of a State Division of Forestry in Pennsylvania. They also called for acquisition of land for state forests and parks, control of fires and reforestation.

One of the earliest efforts to arouse public interest in the preservation and conservative use of the forests was instigated by Franklin B. Hough's address before the American Association for the Advancement of Science. This speech, in 1873, resulted in the Association sending to Congress, and to the State legislatures, a memorial that said in part:

> "The preservation and growth of timber is a subject of great practical importance to the people of the United States, and is becoming every year of more and more consequence, from the increasing demand for its use; and while this rapid exhaustion is taking place, there is no effectual provision against waste or for the renewal of supply."

The Association asked the Congress to create the position of Federal Commissioner of Forestry, whose duties would be to ascertain (1) the amount and distribution of woodlands in the United States, the rate of consumption and waste, and measures necessary to insure adequate future supplies of timber; (2) the influence of forests on climate, especially in relation to agriculture; and (3) the methods of forestry practiced in Europe.

Starting in 1876, there took place a gradual development of national and state forestry policies. In that year, the Agriculture appropriation bill contained a rider on the section dealing with free seed distribution which authorized the Commissioner of Agriculture to appoint "a man of approved attainment and practically well acquainted with the methods of statistical inquiry" to investigate and make a detailed report on forestry.

Dr. Hough was appointed to the new position and published three volumninous reports in 1877, 1880, and 1882. They contained significant information on American forests, forest industries, and European forestry. In 1884, N. H. Egleston succeeded Dr. Hough. At that time, the Division of Forestry, which had been established in 1881, consisted of the chief and three field agents. The annual appropriation was $10,000.

It should be noted that neither Hough nor Egleston had any technical training in forestry. In 1886, the first professional forester was appointed to the position; educated in Europe, B. E. Fernow was faced with the difficult task of adjusting to the limitations of a democratic government because of his European training.

Through the urging of forestry associations, forestry instruction was introduced into the curricula of several colleges beginning about 1883. By 1898, 20 colleges offered instruction in forestry.

Starting about 1880, there were a growing number of expressions of concern over depletion of timber supplies in the East. Fernow in his report of 1899 to the Department of Agriculture, used strong language:

> "Some ignorant people--ignorant both as to the requirements of the wood industries and as to the condition and character of our forest resources--have claimed that the natural growth of young trees, without any attention, following the operations of the lumbermen, would suffice to replace that which is removed and would continue to furnish the required material.

Table 1 - AREA SHIFT OF LUMBER PRODUCTION IN THE UNITED STATES.[1]

(Percentage by Regions)

Region	1850	1890	1919	1929
Northeast	55*	20	7	3
Central	19	13	9	6
Lake States	6	35*	8	5
South	13	20	47*	42
West	6	10	29	44*
All Others	1	2	-	-

* Leading Lumber producing region.

Table 2 - TREND OF TOTAL LUMBER PRODUCTION IN THE UNITED STATES, 1868-1932.[1]

Year	Lumber Production (M Board Feet)
1868	12,755,543
1899	35,084,166
1909	44,509,761
1929	36,886,032
1930	26,051,473
1931	16,522,643
1932	10,159,465

[1] Joseph S. Illick, An Outline of General Forestry, 1936.

> The observant student, not to speak of the professional forester, can readily see that culling the valuable kinds and leaving the inferior tree weeds in possession of the soil prevents, in many cases, any reproduction of the valuable species. In other cases, where the production of valuable kinds does take place as, for instance, with the southern pines, where the young growth is not killed by fires, the development is so unsatisfactory that where, with proper attention, a new crop might be available for the saw in seventy to one hundred years, twice the time will be required to make clear lumber of good quality. In most cases, recurring fires retard this natural regrowth still further or prevent it altogether." (4)

In 1850, "Paul Bunyan" the mythical lumberjack who performed prodigious feats of logging, moved into the Lake States and, by 1890, had pushed the Northeast out of the leadership in lumber production. (See table 1) By 1899, Wisconsin alone was producing 3,330,000,000 board feet annually and led the world in lumber production.

Thirty years later, the Lake States had lost the lumber production leadership to the South. The "inexhaustible forests" of the Lake States had almost been exhausted. Following the logging, forest fires raged over the unbroken areas of slash left by the loggers. Unless human life, livestock or buildings were threatened, the public was indifferent.

Starting about 1885, American forest policies began to take shape. Not in Washington, D.C., but in the states and on private land. Forestry leaders were moving toward public policies with the help of the forestry associations in the forming of public opinion. In 1885, California, New York, Colorado and Ohio set up state forestry agencies; of the four, only New York's forest policy has endured to the present day without interruption, however. By 1900, other states had followed suit; Maine, Pennsylvania, New Hampshire, Kansas, North Dakota, Michigan, and Minnesota took the first steps toward establishing state forestry agencies. (See table 3)

In retrospect, it is interesting to note that it was the states that led the Nation into public forestry, and that the first practice of forestry took place on private land. After 1900, the Federal government moved into action and made major contributions to the development of nationwide forestry programs.

> "It is this unique interaction between two elements of the American Federal system that makes the history of American forestry important to the evolution of the Federal-State relationship in general. It is worth scrutinizing the events in those early years, for from them we can tell much about how American resource policy has evolved to fit the varied conditions of a highly diverse continent." (5)

Progress was being made, but it was to be eleven more years before the Federal and state governments cooperated in forestry programs under authorized agreements. By 1911, the cooperating states were: Illinois, Wisconsin, Ohio, Colorado, Connecticut, Maine, Maryland, Massachusetts, Vermont, Washington, Minnesota, New Jersey, New York and Oregon.

Table 3 - FIRST ESTABLISHMENT OF STATE ADMINISTRATIVE COMMISSION, BOARD, OR DEPARTMENT OF FORESTRY.[1]

Year	States
1885	California, New York, Colorado, Ohio
1887	Kansas
1891	Maine, North Dakota
1893	New Hampshire
1895	Pennsylvania
1899	Michigan, Minnesota
1901	Connecticut, Indiana
1903	Wisconsin, Territory of Hawaii
1904	Massachusetts, Louisiana, Vermont
1905	Washington, New Jersey
1906	Maryland, Kentucky, Rhode Island
1907	Alabama, Oregon
1909	Delaware, Montana, West Virginia
1914	Virginia, Tennessee
1915	Texas, North Carolina
1925	Illinois, Oklahoma, Georgia, Missouri, Idaho
1926	Mississippi
1927	South Carolina, Florida
1931	Arkansas
1934	Iowa
1941	Utah
1945	South Dakota
1952	Wyoming
1957	New Mexico, Nevada, Nebraska
1959	Alaska
1966	Arizona

[1] Some Commissions, Boards or Departments were abolished in a few years and later restored.

Sources: J. P. Kinney, The Development of Forest Law in America, New York, 1917.

Ralph R. Widner, Forests and Forestry in the American States, Washington, D.C. 1968.

The National Association of State Foresters.

LITERATURE CITED

(1) J. P. Kinney, The Development of Forest Law in America, John Wiley and Sons, Inc., New York, 1917.

(2) Herbert A. Smith, Early Forestry Movement in the United States, Agricultural History, Vol. 12, Oct. 1938.

(3) Henry Clepper, Professional Forestry in the United States, Resources For The Future, Inc., Washington, D.C., 1971.

(4) B. E. Fernow, Forestry in the U.S. Department of Agriculture During the Period 1877-1898, Government Printing Office, Washington, D.C. 1899.

(5) Ralph R. Widner, Forests and Forestry in the American States, The National Association of State Foresters, Washington, D.C., 1968.

Chaper II

Pinchot Launches Forest Management In America

Any chronicle of State and Private Forestry in America must recognize the prominent role played by Gifford Pinchot. The son of a wealthy family, Pinchot graduated from Yale in 1889 and left the United States that fall to study European forestry policies and practices. In Europe, he met the distinguished German forester, Dietrich Brandis. After completing his studies at the National School of Forestry at Nancy, France, Pinchot, along with other students, toured the forests of Germany and Switzerland with Brandis.

During the latter part of 1891, Pinchot had several conferences with George Vanderbilt and Frederick Law Olmsted about putting forestry into practice on Vanderbilt's new estate in North Carolina. Olmsted, one of America's greatest landscape architects, along with Richard M. Hunt, had been engaged by Vanderbilt to create a country estate near Asheville, North Carolina, that would be the most beautiful in America.

Pinchot was impressed with Olmsted. This quiet, competent, little man recommended that the Biltmore Estate include a model farm, a game preserve, and an arboretum. The forests within the great estate were to be the first example of practical forest management in the United States.

Thus, Biltmore Forest in North Carolina became the first forest in the United States to be put under technical management. And the man in charge was the first American professional forester. Fernow was surprised that the young forester had decided to take over the management of a private forest in preference to public service. To Pinchot, however, Biltmore Forest provided a "demonstration forest" that Brandis told him was vitally needed in America. If he could prove that good forestry practices could be profitable, then other owners of forest land would adopt forest management.

When Vanderbilt acquired the first 7282 acres of the estate, it consisted mostly of abandoned farms. Pinchot found most of the forest was in deplorable condition. Destructive timber cutting, cattle grazing and frequent fires had left a low-quality stand in many areas. Thus Pinchot first faced the same problems that most American foresters were to face for the next fifty years.

At Vanderbilt's request, Pinchot made reconnaissance surveys of the forest area adjacent to the Biltmore Estate. As a result of these surveys and Pinchot's recommendations, Vanderbilt eventually acquired a total of 120,000 acres of forest land.

Pinchot's arrangement with George Vanderbilt authorized him to take on additional work. Thus, in December of 1893, he opened an office in New York as a consulting forester. As his consulting load increased, he talked to Vanderbilt about getting a replacement for him at Biltmore forest. As a result of these discussions, the position was offered to Carl Alwin Schenck, a competent, professional forester from Germany. In the spring of 1895, Schenck took charge of the Biltmore forest.

By 1898, Pinchot and his associates were enjoying a booming forestry consulting business. Among his associates was Henry Graves who, like Pinchot, would later become the head of the U.S. Forest Service. This group of foresters was carrying on a management program on the extensive Seward Webb forest in the Adirondacks and was,negotiating for the management of the 68,000 acre William Whitney tract in the same area. Similar negotiations were pending with the American Pulp and Paper Company, the International Paper Company, and the Atchison, Topeka and Santa Fe Railroad.

Meanwhile, the Forestry Division at Washington was in trouble with Congress according to Pinchot's observations:

> "Dr. Fernow's opinion of the practicability of forestry was set forth in a paper read by him at a meeting of the Forestry Congress October 18,1893, more than a year after the work at Biltmore began. Said he, `The main reliance for a conservative forest policy, as far as Government action is concerned, lies with the individual state.'

In his ninth annual report, Dr. Fernow said that the Division was `instituted to preach, not practice.' And he added that it `is then, a bureau of information.' The old Division saw too many lions in the path. It held that before it could manage a forest growth intelligently, it must know first of all the biology, or life history of all the kinds of trees which compose it.

All of which was true enough from the point of view of elaborate German forestry, but emphatically not true under pioneer conditions in America." (1)

In April of 1898 Fernow was elected director of the new forestry school at Cornell. On May 11, Secretary James Wilson asked Pinchot to take over the Forestry Division with free rein as to policy and choice of assistants.

In behalf of Fernow, it should be noted that he felt frustrated due to the lack of personnel and funds. In his speech to the Pennsylvania Forestry Association, he discussed means of promoting forestry. The most productive target, according to Fernow, would be the farmer who owned a woodlot. He told members of the association forest destruction in general was of little concern to the average American. It would be necessary to deal with specific forest properties. Forestry manuals would not suffice. The most fruitful method of promoting forestry would be for a "competent, plain spoken man" to address the farmer, face to face.

During this period, Austin Cary was doing effective work with farmers and lumbermen in practical forestry; he was, at this time, employed by the Berlin, New Hampshire mills.

Pinchot's appointment as chief of the Division of Forestry was a fortunate circumstance in the history of American forestry. With great energy and magnetic leadership, he transformed the Division of Forestry from a bureau of information to an active on-the-ground participant in practical forest management. Under his excellent leadership, the number of professional foresters on the staff increased from two to 153 by 1905. These foresters provided practical forest management assistance to farmers, owners of large forest estates, lumbermen, and other forest land owners.

Management plans were prepared for small woodland owners without cost; they also prepared plans and gave on-the-ground assistance to owners of larger tracts for a fee. This small charge was to cover travel and subsistence.

The annual report of the Secretary of Agriculture for the year ending June 30, 1899, describes some of the accomplishments in forestry with an appropriation of $28,520:

> "During the year, applications were received from 123 owners in 35 States for the management of 1,513,592 acres. Of these applications, 48 were for large tracts covering 1,506,215 acres. The remainder was for woodlots. Personal attention on the ground

was given to 41 tracts covering 400,000 acres in 19 States. The contribution of private owners to the expense of this work was about $3000." (2)

When Pinchot worked as a consultant, he prepared forest management plans for several properties in the New York Adirondacks. In the process, he met the young outdoorsman, Governor Theodore Roosevelt. With common interests, the two men were immediately drawn to each other. This friendship was to be of great significance to American forestry.

While attending a Pan-American Exposition on September 6, 1901, at Buffalo, New York, President William McKinley was felled by an assassin's bullet and on September 14, Theodore Roosevelt took the oath of office as the 26th President of the United States.

Roosevelt was an exceptional man. Young, intelligent, and energetic, with a deep interest in the out-of-doors and natural resources, he immediately became interested in forestry.

Within three months after taking office, President Roosevelt accepted a recommendation from Pinchot and told Congress that the forest reserves should be transferred to the Department of Agriculture under the Bureau of Forestry. The American Forestry Association and other influential organizations threw their weight behind the proposal which had an important influence on the thinking of the Congress, the President and the public. On February 1, 1905, President Roosevelt gave final approval to the transfer. Sixty-three million acres of forest reserves were now in the Department of Agriculture. Five months later, the Bureau of Forestry became known as the U.S. Forest Service. Before the turn of the century, people in general had little interest in protection or management of the Nation's forests; by 1905, public awareness of the value of forests was becoming widespread.

Pinchot worked diligently to strengthen his organization. He commissioned the New York firm of Gunn and Richards to make a study of the Forest Service and evaluate the organizational structure. The report on the study was gratifying to Pinchot; it praised the personnel as intelligent, loyal and enthusiastic. There was a note of caution, however; in some instances, the report said, there was a tendency to lose control because of the decentralization that Pinchot had sponsored. (3) Time has proven, however, that the decentralization has been one of the great strengths of the Forest Service, and has made it unique among Federal agencies.

In his annual reports, Pinchot warned that future timber supplies would be heavily dependent on private forests. From 1905 to 1908, therefore, official attention to non-Federal forest management remained substantial. Since the beginning of the cooperative program, assistance in preparing management plans had been requested for nearly eleven million acres. Pinchot sent out a questionnaire to all the cooperators and 75 percent of those who responded claimed they had adopted the management plans and were applying practical forestry in some way. Recognizing a growing obligation of the Forest Service for providing assistance to private forest owners, he established an office of State and Private Cooperation in 1908, (4)

From 1905 to 1909, the Forest Service participated in many types of cooperative forestry work in many States. The work included preparation of planting plans for railroad and coal companies, cooperative forest studies with the States of California, Delaware, Missouri, Kentucky, Mississippi, New Hampshire and Illinois.

Meanwhile, disastrous fires continued to ravage forests, nation-wide. The Yacolt fire in 1902 laid waste 700,000 acres of timberland in Washington and Oregon. In 1903, a very destructive fire burned over 450,000 acres in the Adirondacks. Although each of these holocausts attracted public attention for only a day or two, they contributed to a public sentiment for protection of America's forests.

Prior to 1911, the States had made little progress in protecting private forest lands from fire. Although 28 States had forestry organizations of some kind in 1911, their primary function was to gather information and give advice to woodland owners. Financial support was meager. A mere 16 States had forest protection organizations headed by a State Forester or Chief Fire Warden. Much of the fire detection and suppression was primitive and ineffective; the most effective forest fire protection was performed by a few protection associations, primarily in the West.

A serious problem plagued the private protection agencies from their inception. Within their protection units, were many intermingled tracts belonging to non-members. In order to protect association lands, it was necessary to fight fire on lands belonging to non-contributors.

In 1909, the Western Forestry and Conservation Association was organized. Most of the credit for the birth of this organization goes to George S. Long, western manager for Weyerhaeuser Timber Company. The Association fought for development of western fire codes and persuaded state legislators to pass laws requiring reasonable fire prevention measures on the part of timberland owners and operators. Through the efforts of W.F.C.A., compulsory patrol laws were established in some States. They required the timberland owners to protect their own land or pay the state or association to protect them.

Meanwhile, the Roosevelt-Pinchot team was beginning to help forestry take giant strides forward. No President before Roosevelt had lived in the West. No President before him had fully recognized the importance of the Nation's forests as a great renewable resource. Roosevelt had lived for several years at a ranch near Medora, North Dakota. He also had a strong affection for the South through the influence of his mother who was proud of her southern ancestry.

After a year in the White House, Roosevelt made a tour of the South during which he visited Biltmore Forest. Carl Alwin Schenck was still the resident forester at Biltmore. He looked forward to the President's visit as he held him in high esteem. His actual contact with the President, however, proved to be an embarrassing experience for Schenck. In "Birth of Forestry in America" he relates the incident:

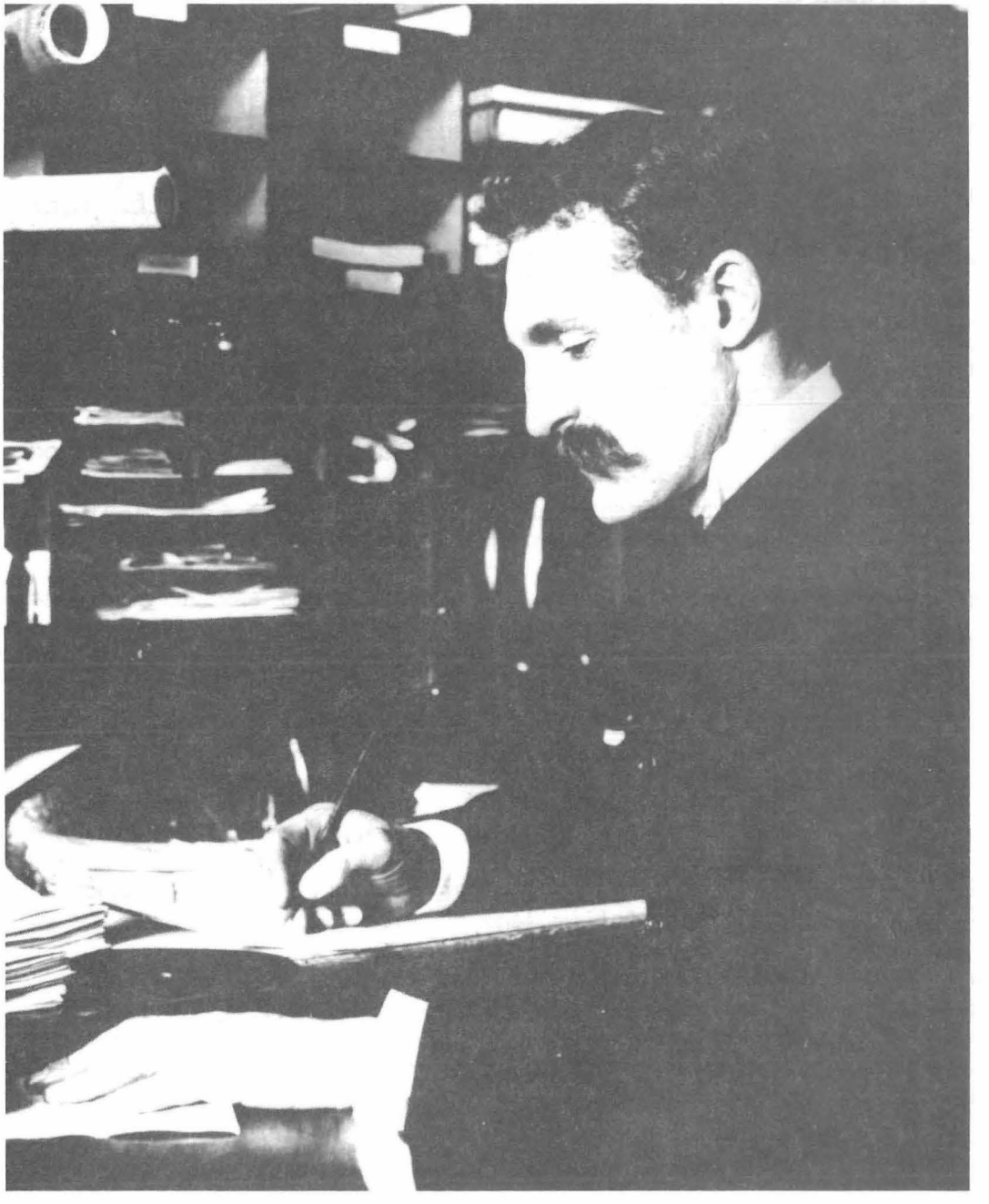
> "About a year after he became president, Roosevelt made a tour of the South, during which he stopped at Asheville, a thoroughly Democratic town. There on September 9, 1902, he had the courage to speak to masses of his political opponents from a platform in the public square. The square was packed. Roosevelt spoke on three great civic virtues, namely, honesty, courage and common sense. He spoke in a manner resembling closely that of the German Emperor Wilhelm II, his mouth set square, so that his white teeth appeared between the angles of the squared mouth drawn backward. And he spoke like the Emperor, in short, abrupt sentences pushed out rather violently and interrupted by several seconds of silence. In the midst of his address, a torpedo was exploded. Everyone thought of another attempted assassination, and some people began to flee. Roosevelt alone was entirely undisturbed. He must have had glorious nerves.

> When I learned that Roosevelt was visiting the Vanderbilts at Biltmore House, I made it a point to call there, driven partly by curiosity to see a president of the United States at close hand and partly in the hope of discussing with him the problems of American forestry. When he shook hands and learned that I still retained my German citizenship after six years in the United States, he exclaimed: `Nobody has a right to work here for so long without becoming a citizen of the United States!' His words fell on me like a cold bath. For a discussion of forestry there was no chance; the president of the United States did not care to be advised by an alien. Why should I change my citizenship while staying in the United States when no American staying in Germany was abandoning his affiliation? I was proud to be a German." (5)

Pinchot felt that the conservation of natural resources was the key to the safety and prosperity of the American people. He put it this way: "The very existence of our Nation, and all of the rest, depends on conserving the resources which are the foundations of its life."(1)

He discussed this thought with many of his co-workers. But it was W.J. McGee who gave it the greatest support. He sensed its full implication and saw the future importance of conservation of natural resources. He became the constructive leader of the movement. It was McGee who defined the new policy as the use of natural resources for "the greatest good of the greatest number for the longest time."

With the support of McGee, Overton Price and others, Pinchot took his idea to President Roosevelt. Without hesitation, T.R. accepted and adopted the proposition. It was directly in line with his own thinking. It became the heart of his administration.



Gifford Pinchot

Chief of the Division of Forestry, 1898

LITERATURE CITED

(1) Gifford Pinchot, Breaking New Ground, 1947, New York.

(2) Gifford Pinchot, Progress of Forestry in the United States, Yearbook of the Department of Agriculture for 1899.

(3) Gunn, Richards and Company, United States Department of Agriculture, Forest Service, Preliminary Report

(4) Chief's Annual Report, 1905, 1906, 1907 and 1908.

(5) Carl Alwin Schenck, The Birth of Forestry in America, Biltmore Forest School, 1898-1913, 1974.

Chapter III

The Weeks Law: Federal-State Cooperation Develops

The fickle fate of forestry in America was to bring about more change. In 1908, the electorate selected William H. Taft to succeed Roosevelt as President. Although Roosevelt had selected Taft to assure continuation of his policies, events soon proved that policies were going to change under Taft. The first indication of change occurred when Taft appointed Richard A. Ballinger as Secretary of Interior. There were sharp differences of opinion between Ballinger and Pinchot, particularly regarding the disposition of the disputed Cunningham coal claims in Alaska. Ballinger, at once, withdrew some of Pinchot's authorities in dealing with Interior personnel. Pinchot fought back and openly attacked Ballinger. As a result, Taft requested Pinchot's resignation on January 7, 1910.

To begin with, Taft viewed the battle between Pinchot and Ballinger as "a row over nothing serious, except a kind of jealousy and friction between the departments that ought to be avoided." But the President was not going to permit any of his department heads to be undermined by anyone, not even Pinchot. Taft referred to Pinchot as "a good deal of a radical and a good deal of a crank." He would not seek Ballinger's resignation. It was Pinchot who must go.(1)

Pinchot's firing was the passing of an era. During his reign, he made errors in judgement; through his relationship with Roosevelt, he overestimated his power and authority. But Pinchot was a man of courage and vision who made a major contribution to forestry in America.

On the morning after his firing, Pinchot went to the Forest Service office to say good-bye to the men he had worked with through the years. He called them together and spoke to them:

> "I want every man here to stay in the Service. I do not want any of you to do anything whatever that will let this Service fall, or even droop, from the high standard that we have built up for it together. That is first, never forget that the fight in which you are engaged for the safe and decent handling of our timberland is infinitely larger than any man's personal presence or personal fortunes. We have had here together the kind of association that I do not believe any set of men in the Government service ever had before.

Table 4 - FIRST STATE FORESTER APPOINTMENTS AUTHORIZED BY STATE LAW.

Year	States
1901	Connecticut
1903	Pennsylvania, Hawaii (Territorial Forester)
1904	Massachusetts, Wisconsin
1905	California, Washington
1906	Maryland
1907	New Jersey
1908	Vermont
1909	Delaware, Michigan, Montana, New Hampshire, West Virginia
1910	Louisiana
1911	Colorado, Minnesota, Oregon
1912	Kentucky
1913	New York
1914	Virginia, Tennessee
1915	North Carolina, Texas
1919	Indiana
1921	Maine, Ohio
1924	Alabama
1925	Idaho, North Dakota, Georgia, Oklahoma, Missouri
1926	Illinois, Rhode Island, Mississippi, Nebraska
1927	Florida
1928	South Carolina
1933	Arkansas
1934	Iowa
1941	Utah
1945	South Dakota
1952	Wyoming
1957	Nevada, New Mexico
1958	Alaska
1961	Kansas
1966	Arizona

Sources: J. P. Kinney, The Development of Forest Law in America, 1917.

Ralph R. Widner, Forests and Forestry in the American States, 1968.

The National Association of State Foresters.

> Never allow yourselves to forget that you are serving a much greater master than the Department of Agriculture, or even the Administration. You are serving the people of the United States."(2)

The foresters were stunned at the firing of their Chief. Albert Potter was named acting forester but stepped aside for the appointment of Henry Graves. Well qualified by education and experience, Graves' appointment offered assurance that professional foresters, not political appointees, would run the agency. Rebuilding shattered morale was Graves' first task. He went about it with dispatch, mending relations with the Secretary and other bureau chiefs.

The next major step forward for forestry in America, particularly State and Private forestry, was brought about not by a forester, but by a banker from Massachusetts. John Weeks went to Washington as a newly elected Representative in 1905. A conservative Republican with a sincere interest in the forests of New England, he felt the time was right to introduce forestry legislation.

On April 24, 1907 he introduced a bill for protecting navigable streams and promoting navigation. The bill would permit agreements or compacts among the States for the purpose of conserving forests and water supply. It also authorized appropriation of Federal money to be used in cooperation with any State for the protection of forested watersheds of navigable streams. Other features of the bill included broad authority to purchase lands anywhere in the country. It was clearly a compromise. The features of the bill on which the state forestry programs have since been built were in line with the thinking of those who questioned the necessity of purchasing land merely to protect the streams. The bill was defeated, but was reintroduced in a revised version by Weeks on July 23, 1909. At this time, he credited the American Forestry Association with having helped in the formulation of the new bill.

This version of the bill passed in the House by a nineteen-vote margin. Prospects for passage now looked good. The strong Western opposition in the Senate had been tempered by the 1910 holocaust in Idaho. President Taft signed the Weeks Bill into law on March 1, 1911 and the cooperative program between the Federal government and the states was authorized.

Section 2 of the Weeks law had come in for little discussion during the lengthy congressional deliberations. In retrospect, however, this section stands out as one of the most important parts of the law. This section authorized $200 thousand to be used as Federal matching funds with the states for forest protection. The Weeks Law support for the states came at a crucial time when many of the state protection programs were floundering. The entire concept of Federal matching money to boost state incentive began with the Weeks Law.

Cooperative programs were not new. Pinchot's programs on private lands at the turn of the century were a firm step in this direction. The idea of Federal funding of non-Federal programs, however, marked an entirely new era in forestry.

> "Although the Weeks Law of 1911 offered the states financial inducement to cooperate with the Federal government and among themselves to reduce forest fire losses, state accomplishment was sporadic and inconsistent for another decade. Some states were making steady progress in state forest administration as well as in fire control; others were lagging. In the political traditions of the times, each state was apt to view its forestry problems from purely local consideration and to go its own way with little attention to what other, even adjacent states, were doing. Such counsel and guidance as the Forest Service could induce the states to accept had to be offered with utmost tact because the states were jealous of their rights and prestige."(3)

A meeting of State Foresters from 16 states was held in Atlantic City, New Jersey, November 12-13, 1920. Less than half of the 32 states having forestry departments were represented. Present from the Forest Service were W. B. Greeley, E. E. Carter, and J. G. Peters who worked closely with the states out of the Branch of Forest Management of the Eastern Division of the Forest Service.

Certain recommendations proposed by the Forest Service for increased Federal-state cooperation in fire protection and forest renewal were approved. The State Foresters recommended also that a Federal appropriation of $1 million be made available for state cooperation in fire prevention and control, forest investigations and timber production, including forest planting. One of the results of the conference was the unanimous decision to form a State Foresters' Association.

Thus, a month later, during a meeting on December 8-9, 1920, the Association of State Foresters (now the National Association of State Foresters) was formally organized in Harrisburg. The Pennsylvania Department of Forestry, of which Gifford Pinchot had recently been appointed Commissioner, was host to the conference. William T. Cox of Minnesota was elected the association's first president. J. S. Holmes of North Carolina was elected secretary of the conference.

> "During the half-century that the association has been in existence, it has functioned as an open channel of cooperation between the states and the Federal government. Its activities have strengthened forestry and related resource policies, not only of the Federal and state agencies involved, but of private interests as well. As a clearinghouse of information, it has enabled state administrators to keep abreast of new developments everywhere in the nation, and thus to consider the progress in state forestry in the context of the national program. Through its annual meetings, the association has fostered high standards of professional employment, improvement in the compensation of state forestry employees, and a workable arrangement of cooperation in fire prevention and control. As the binding nexus between the Federal government and the states, it has been the effective instrument for coordinating the often conflicting interests of the many bodies engaged in promoting forestry." (3)

Administration of the Weeks Law presented problems for the Forest Service. There were few legislative directives to guide the direction of the program, nor were there previous programs of similar nature to be used as a guide.

One of the first decisions to be made was the matter of what constituted a "navigable river." After considerable study, the Forest Service decided to use the definition used by the Chief of Engineers, U.S. Army. "Navigable rivers" were determined on the basis of tonnage records. Thus, the areas on which Federal funds could be spent were the forested watersheds of rivers so designated.

Early in 1913, the 15 cooperating states contained 139,500,000 acres of non-Federal land in need of organized protection, 53 percent of which was classified as navigable watersheds. In order to receive Federal help, the states were required to have some semblance of a fire protection organization and reasonable cooperation from private forest landowners in meeting their obligations.

During this period, Federal funds were not allotted directly to the states. Rather, these funds were earmarked for expenditure by the Federal government in each state. Federal funds were used solely for salaries and expenses of Federally-employed towermen at fire lookout stations, or for men patrolling on foot or horseback. These men worked under the supervision of the state forester or comparable official as a part of the state fire organization. Their work was, by law, confined to the forested watersheds of navigable streams. The use of Federal funds for the salaries and expenses of towermen at stationary lookouts was given priority to encourage the states to develop a more permanent detection system. Due to the limited amount of Federal funds available, allotment to each state was limited to $10,000. As more states joined the cooperative program, the maximum was reduced to $8,000.

> "The Secretary of Agriculture was given considerable leeway to cooperate with the states `on conditions as he deems wise.' In exercising this authority, Secretary James Wilson delegated to the Forest Service the responsibility for administering the Weeks Law. Chief forester Henry S. Graves assigned the job of handling the cooperative fire control work to J. Girvin Peters, Chief of the Division of State Cooperation in the Branch of Silviculture. William B. Greeley was Assistant Forester in charge of the Branch at the time the Weeks Law was enacted."(4)

Girvin Peters was a diplomat and master strategist who proved to be capable of dealing with the delicate Federal-state relationship during this time. He continued in this position until his death in 1928.

At first, Weeks Law inspections in the states were carried out from the Washington office of the Forest Service. After a few years, field inspection headquarters were established. The first field inspector was Crosby A. Hoar who worked out of Duluth, Minnesota in the states of Minnesota, Wisconsin and Michigan. Gordon T. Backus was headquartered in Asheville, North Carolina until 1923 when he was replaced by E. Murray Bruner. Claude R. Tillotson was assigned to Weeks Law inspections in the New England States.

> "The work of a Federal Weeks Law inspector was not easy. In many important respects, it required a different approach than inspection of Federally administered projects on government-owned land. These inspectors had to effectively persuade state administrators to make needed changes in their policies, ideas or methods.

Federal inspectors were technically trained foresters who had more or less of the crusading spirit derived, or carried over, from Gifford Pinchot and his early associates. In their daily work they observed the great need for a broad application of forestry principles and they recognized that this could only be accomplished through support of an informed citizenry. That they were expected to have some of the crusading zeal and ability is apparent from suggestions the Forester sent to resident field inspectors on May 12, 1922 which stated in part:

"In connection with your work as Inspector in a group of states cooperating with the Forest Service in fire protection, it is my desire to have you utilize the opportunities available for informing the people of these states about their forestry situation, their forestry needs, and what the state and Federal agencies are doing. Your main job, of course, is to inspect the fire protection work of the states to which the Federal government contributes and to cooperate with state forestry officers in making the work as effective as possible. To the extent, however, that you can supplement this principal duty by educational and informative work, in a systematic way, the net accomplishment will be greater. We must all recognize that forestry development in the United States rests fundamentally upon the rate and degree to which the public can be educated as to the needs of the situation, what is now being done, and what further things need to be done. It is up to all of us to contribute to this educational work to the extent that we can, and to do so intelligently and systematically."(4)

The chief forester of the Forest Service was saying, in a tactful way, that the state forestry personnel needed guidance, training, and recognition. Most of the state protection people were poorly paid, poorly equipped and poorly led. As Crosby Hoar expressed it: "State wardens in the Lake States, at that time, were often lonely. Some of those in the wilder areas found themselves the only out-spoken advocates of real fire control. The farmers wanted to burn over their peat lands and were careless about letting their fires escape. Loggers would try to evade disposing of their slash. People objected to getting burning permits and often burned without them. There were still many who thought that fire on the cutover lands was beneficial, by paving the way for more settlers and farmers, not realizing that the land was unsuited for farming. Local justices and juries were reluctant to enforce the forest fire laws."

The loggers were moving out of the Lake States, but they had left a vast area of cutover land covered with slash. Millions of acres of this land was tax-delinquent in Michigan, Wisconsin and Minnesota. Local government was destitute. No tax money was available from these lands which would produce no income for years to come. Most of the cutover land was not suitable for farming. Its only source of income lay in forest crops.

Unfortunately, forest crops were many years in the future and not even then, unless the lands were protected from fire. To protect the forests from fire required considerable investment. Private owners had no interest in spending money to protect their lands; in fact they were letting the lands go tax-delinquent. The big timber companies were washing their hands of the whole problem.

It remained a problem of the states and the Federal government. Fire protection would be a thankless and heart-breaking task for many years. Far-seeing citizens realized that these lands must be protected and rehabilitated and they began to voice their opinions. Not in any great volume, but the voice called out for action.

And so, under the Weeks Law, the state-Federal team went to work to protect and rebuild these forest lands. But the state organizations were weak and the Federal funds were inadequate.

Critics of the Federal inspectors said they were too lenient in their requirements of the states. Crosby Hoar spoke out in defense of the inspectors:

> "It is useless at this time to speculate upon what increase in state development and efficiency might have been brought about by greater Federal insistence, backed by the threat to withdraw or curtail Federal help. Probably some of the states should have made faster progress than they did. In general, however, State Foresters were ahead of their legislators, politicians, and general public in their desire for better forest fire control and did their best to secure it. They were best able to understand and cope with their obstacles.
>
> It is significant that the states have made very substantial progress in controlling forest fires. Under the supervision of their own leaders, they have built strong agencies responsible to local needs and inspiring the maximum local pride and satisfaction. The real success of Federal cooperation has been in helping the states to help themselves."

On January 9-10, 1913, a conference was held in Washington, D.C., for a wide-open discussion of the fire control program under the Weeks Law. Present were representatives from the cooperating states and officials from states interested in joining the program. Attending from the Forest Service were: H. S. Graves, W. B. Greeley, J. G. Peters, E. H. Clark, W. L. Hall, R. Y. Stuart, and L. S. Murphy.

The objectives of the conference were:

(1) To provide for an informal discussion of the administration of Section 2 of the Weeks Law and of the various methods of fire control which have been adopted by the states.

(2) To determine the results of the cooperation to date.

(3) To encourage states to enact legislation enabling them to qualify under the Weeks Law.

(4) To determine whether the experiment had been a success and if so, the annual appropriation which should be asked of Congress in order to continue it.

The opening remarks by chief forester Graves set the tone for the meeting:

"We have called this conference to discuss that section of the Weeks Law authorizing cooperation by the Federal government with the State in protecting from fire the forests situated on the watersheds of navigable streams. We have before us for consideration not only the details of carrying out this law, but also the results which have already been accomplished as bearing on the wisdom of the appropriation which has been made, and the desirability of extending the policy through subsequent appropriations by Congress.

The appropriation of $200,000 for Federal assistance in fire protection initiated a new policy. When the Weeks Law was under consideration, it was maintained by some persons that greater results from a given expenditure of money would be accomplished by annual appropriations to aid the states in fire protection than by the establishment of National Forests by purchase. The appropriation of $200,000 was, in a way, an experiment to test the efficacy of this kind of Federal aid. There was recognition of the principal

Table 5 - FIRST AUTHORIZED COOPERATION OF THE STATES WITH THE BUREAU OF FORESTRY, U.S.D.A. OR THE U.S. FOREST SERVICE IN FORESTRY PROGRAMS.

Year	Cooperating States	Total Number of States
1903	Illinois	1
1905	Wisconsin	2
1906	Ohio	3
1911	Colorado, Connecticut, Maine, Maryland Massachusetts, Vermont, Washington, Minnesota, New Jersey, New York, Oregon	14
1912	Kentucky	15
1913	Idaho, Montana, South Dakota, New Hampshire, West Virginia	20
1914	Virginia, Michigan	22
1915	Texas, North Carolina	24
1918	Louisiana, Rhode Island	26
1919	California	27
1920	Pennsylvania	28
1921	Tennessee	29
1924	Alabama, New Mexico	31
1926	Georgia, Missouri, Mississippi, Oklahoma	35
1927	Indiana	36
1928	South Carolina, Florida, Delaware	39
1931	Nevada, Hawaii	41
1933	Arkansas	42
1941	Utah	43
1946	Iowa	44
1955	North Dakota	45
1958	Nebraska	46
1959	Wyoming	47
1960	Alaska	48
1962	Kansas	49
1966	Arizona	50

Sources: J.P. Kinney, The Development of Forest Law in America, 1917.

Ralph R. Widner, Forests and Forestry in the American States 1968.

National Association of State Foresters.

> that there is a national interest in these great areas of forest lands, and that there is not only justification, but a duty on the part of the Federal government to see to it that these national interests are protected."(4)

Following the remarks by Graves, there was a lengthy discussion regarding what had been accomplished during the two seasons of cooperation. Had it resulted in a stimulus to the states to meet their responsibility in forestry? Had it resulted in securing better protection than otherwise would have been the case? What effect had the limitation on forests on navigable streams had? Had the results from this standpoint justified the expenditure of $200,000? In securing such protection, had other national and interestate interests been secured aside from mere protection to navigation?

Graves emphasized that before going to Congress with a request for an extension of this appropriation, the Forest Service must be able to show that this new policy, which was inaugurated as an experiment, had produced certain definite results which justified the Nation in continuing the work.

J. G. Peters of the Forest Service presented many facts which convincingly demonstrated that the results obtained were of an importance even greater than could have been anticipated. There was a strong feeling by those present that cooperation in fire control under the Weeks Law had been successful. They felt the program should be continued on a permanent basis and that Congress be requested to make annual appropriations of at least $100,000 as the Federal share of the cooperative program.

In July 1914, the Forest Service established a separate office of Cooperation with Private Timberland Owners, with E. S. Bryant in charge. Then, in January 1920, the Office of State Cooperation was merged with the Office of State Cooperative Fire Protection which had been set up in 1911.

In 1920, a survey was made to determine the estimated annual cost of protecting non-Federal forest lands from fire. This information was used to prepare the initial area and cost report. The study indicated that cooperation should be extended to 35 states for protection of 315,000,000 acres of non-Federal forest land. Less than one-half of this area was then receiving organized protection. At a minimum average cost of 1-1/2 cents per acre, the annual cost of protection would be $4,725,000.

This information provided the ammunition for the presentation of a strong case for a substantial increase in the annual appropriation. The Congress was impressed and raised the annual appropriation to $400,000 for the fiscal year of 1922. It remained at this figure for the the next four fiscal years at which time the cooperative fire control program was absorbed and expanded under the Clarke-McNary Act. This Act passed in 1924. Federal appropriations for fiscal year 1926 and thereafter were made under the new Act. During the operation of the fire protection under the Weeks Law, a total of $2,439,826 of Federal money had been expended. State and Private expenditures during this same period were $12,652,985 -- five times the Federal contribution.

Seven years after the first major policy meeting, a second policy meeting was held at Atlantic City, New Jersey. William B. Greeley had succeeded Graves as chief forester in April 1920. He outlined the purpose of the meeting and asked for a system of allocating Federal funds based on the cost of an adequate system of fire protection in each state. The state representatives agreed.

William Buckhart Greeley was another forester who was to play a prominent role in the history of state and private forestry. Born in 1879, the son of a New York minister, he graduated from the University of California and received his masters degree in forestry from Yale. He worked his way up rapidly, and at age thirty-one was made assistant Chief of the Forest Service. While serving for ten years in this position he did much to advance State and Private Forestry.

A third conference was held with the Weeks Law cooperating states at Washington, D.C. on April 28-29, 1922 to reach decisions on the questions discussed in Atlantic City. All of the collaborating states were represented except Wisconsin. The major purpose of the meeting was to reach an agreement on the most equitable method of allotting Federal funds in the event of an expanded program.

The question was raised as to whether the relative financial ability of a state to meet its fire control obligation should be considered in allotting Federal funds. After considerable discussion, the idea was voted down by the states chiefly because they belived it was not directly related to the fire control job. Furthermore, such a factor would be difficult to apply.

Greeley stressed the need for maintaining a protection system on a permanent basis. He pointed out that it would be a waste of public money for the Federal government to participate in a cooperative program on a temporary basis. In order to give stability to the program, the Forest Service believed that protection expenditures to be recognized must be based on State law rather than on voluntary local effort. Greeley explained, "We have seen a good many instances where there will be a spasmodic effort at forest protection for a season or two and then be discontinued. We cannot ask Congress to appropriate money to cooperate in that kind of forest protection. There has got to be a reasonable measure of stability . . . which is expressed by state legislation." (4)

At the time the Weeks Law was enacted, in 1911, 27 states and the Territory of Hawaii had some type of forestry administration. Only 16 of these had appropriated money for the protection of forests from fire. When the Act was passed, 11 of the 16 states promptly entered into a cooperative agreement with the Federal Government.

Sixty million acres of forest land were protected in the states of Connecticut, Maine, Maryland, Massachusetts, Minnesota, New Hampshire, New Jersey, New York, Oregon, Vermont and Wisconsin. By the last year of the Weeks Law program (1925) twenty-nine states were cooperating with the Federal Government to protect 178 million acres. There is general agreement that forest fire protection was stimulated in all the states by the Federal aid and encouragement made possible by the Weeks Law.

During the first 10 years, Federal allotments were limited for use in fire <u>detection</u> only, to employ lookout observers and patrolmen. As the state fire control operation expanded, it became apparent to both the Forest Service and the states that it would be necessary for the Federal Government to share in the entire fire control program. In July 1921 the policy was changed and each cooperating state was given a specific Federal allotment which could be used on any legitimate fire protection obligation.(5)

The Forest Service was charged with total administration of the Weeks Law. It worked closely with the states in setting up their fire control organizations. Once a state protection system had been established, the Forest Service assigned experienced personnel to inspect the work and help the states operate effectively. A pattern for cooperation between state and Federal foresters was established; one that was to be followed and built upon to bring about the highly-regarded state fire control organizations of the present day.

LITERATURE CITED

(1) Donald P. Anderson, William Howard Taft: A Conservationist's Conception of the Presidency, New York, 1965.

(2) Gifford Pinchot, Breaking New Ground, Harcourt, Brace, New York, 1947.

(3) Henry Clepper, Professional Forestry in the United States, Resources For The Future, Inc., Washington, D.C., 1971.

(4) Earl S. Peirce and William J. Stahl, Cooperative Forest Fire Control, A History of Its Origin and Development Under The Weeks and Clarke-McNary Acts, Forest Service, USDA Bul. 1964.

(5) Eliot Zimmerman, Forest Fire Detection, Forest Service, USDA Bul., 1969.

Chapter IV

The Clarke-McNary Act: Cooperative Forestry Expands

Progress was being made in forest fire protection, but it was painfully slow. By 1915, thirty-one states and Hawaii had taken legislative action to set up forestry commissions, boards, or departments. In direct state appropriations for forestry, the top ten states were: Pennsylvania, New York, Wisconsin, Minnesota, Maine, Massachusetts, Maryland, Washington, Oregon, and Michigan. However, all state appropriations for forest fire protection were meager.

Seventeen states were still without laws providing for forestry administration--four years after enactment of the Weeks Law. These states were Arizona, Arkansas, Florida, Georgia, Idaho, Illinois, Iowa, Mississippi, Missouri, Nebraska, New Mexico, Nevada, Oklahoma, South Carolina, South Dakota, Utah and Wyoming. Unfortunately, many of these states had the most serious fire problems in the nation.

Still working diligently toward the goal of nation-wide forest fire control, were the State Forestry Associations and the AFA. Henry Graves, then president of the American Forestry Association, called for "immediate Federal action--more vigorous and on a far greater scale than heretofore." A bill introduced by Senator Charles L. McNary of Oregon was pending in the Senate, when a bill was introduced in the House by Representative John D. Clarke of New York. Both bills called for increased Federal-state cooperation for fire protection and other forestry programs.

Strangely, the major benefits to the cooperative programs in the Clarke-McNary Act came about indirectly. In the early twenties, there was violent controversy over public control of timber cutting on privately owned forest lands. At the end of World War I, Colonel Henry Graves had just returned from Europe where he was an officer in the 10th Engineers (Forest Regiment). He spoke before a New England Forestry Conference in February 1919, and followed this with many speeches throughout the country. Graves believed it was high time that further devastation of the Nation's forests be brought to a halt and that practical forest management be applied to all forest lands, both private and public. His proposals for regulation were opposed by many timberland owners due to the uncertainty as to the method of public control contemplated.

In 1919, the Society of American Foresters (SAF) appointed a committee to consider "the application of forestry." The chairman was Gifford Pinchot. This committee prepared a report which was sent to all members. It outlined a proposal which included direct Federal control over the management of privately owned timberlands.

Industry was quick to retaliate with its own national timberland program. In November of 1919, the Committee on Forest Conservation of the American Paper and Pulp Association (APPA) submitted its proposal. Among the recommendations was a Federal annual appropriation for cooperation with the states in the amount of one million dollars. The proposal differed from the SAF plan in that it eliminated any public regulation. In April 1920, the National Lumber Manufacturers Association (NLMA) also proposed a national forestry program. E. T. Allen, forester for the Association, had long advocated better protection against forest fires. He aggressively pushed the NLMA program which was similar to the APPA proposal. It did propose, however, that any regulatory legislation would be administered by the states, rather than the Federal government.

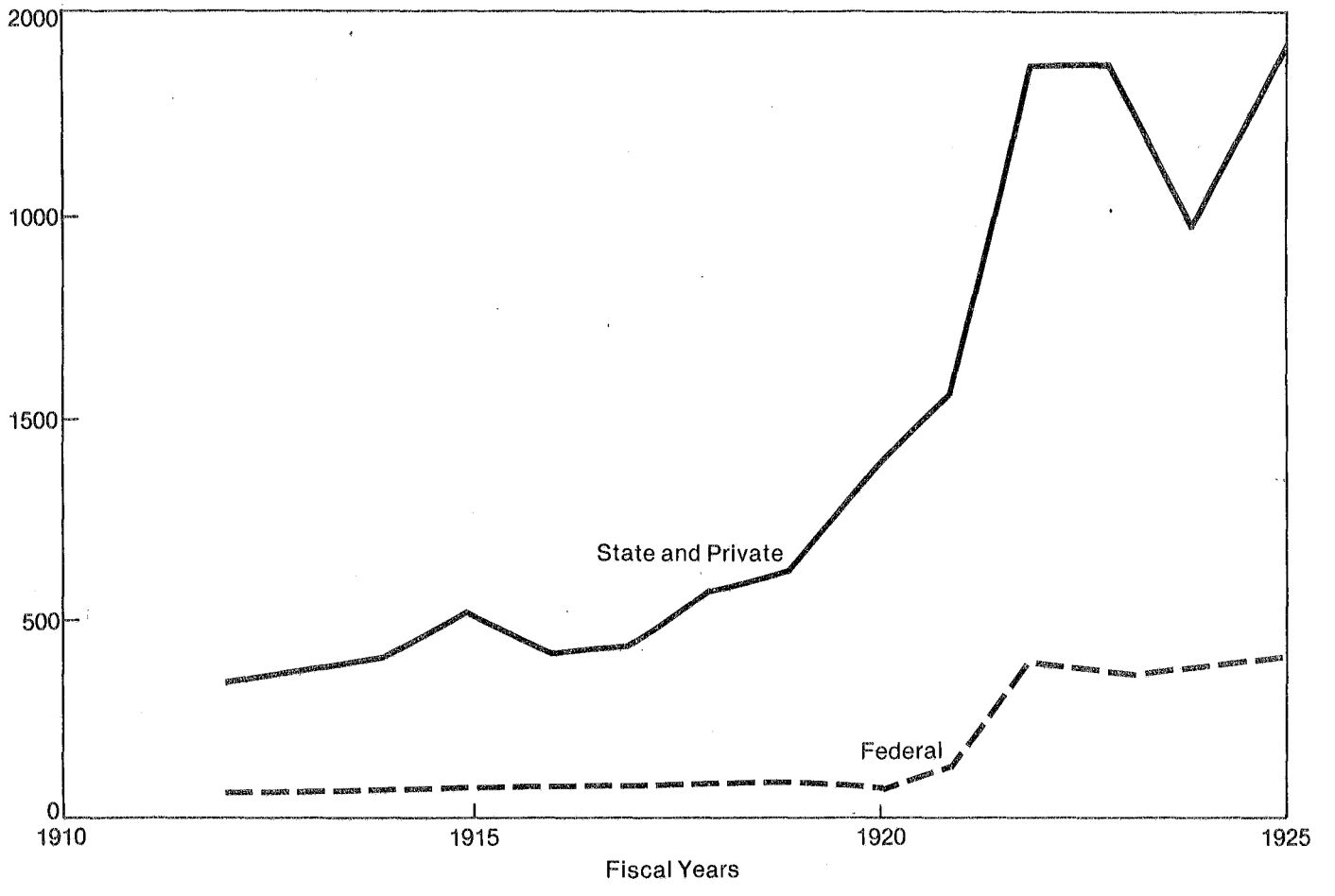
Chief Forester Greeley had firm convictions that any initial program involving public control over timber cutting practices on private lands should be a Federal-state cooperative undertaking.

Early in 1920, Senator Arthur Capper of Kansas introduced a resolution which directed the Secretary of Agriculture to make a comprehensive investigation of the forest situation in the Nation and to prepare a report. The resolution was approved by the Senate.

The Forest Service submitted its report on June 1, 1920. It was popularly known as the "Capper Report." The publication of this report gave the Forest Service an excellent opportunity to get the timber supply situation before the public in an authoritative way, and to suggest a program for Federal forestry legislation.(1) The first recommendation in the report concerned cooperation with the states:

> "Legislation is needed, as an extension of section 2 of the act of March 1, 1911 (Weeks Law), which will enable the Forest Service to assist the respective states in fire protection, methods of cutting forests, reforestation, and the classification of lands as between timber production and agriculture. It should carry an initial annual appropriation of not less than $1,000,000 expendable in cooperation with the states, with a proviso that the amount expended in any state during any year shall not exceed the expenditures of the state for the same purposes.

Forest Fire Control Under Weeks Law Cost of Protection



Sources: CFFC Statistics.

> The Secretary of Agriculture should be authorized, in making such expenditures, to require reasonable standards in the disposal of slashings, the protection of timbered and cutover lands from fire, and the enforcement of equitable requirements in cutting or extracting forest products which he deems necessary to prevent forest devastation in the region concerned, and to withhold cooperation, in whole or in part, from states which do not comply with these standards in their legislative or administrative measures. Federal activities under this law should not be restricted to the watersheds of navigable streams but should embrace any class of forest lands in the cooperating states.
>
> This law, greatly extending the very limited Federal aid now given to the states in fire protection, will enable the Forest Service to organize and carry forward a Nationwide drive against the chief cause of devastation---forest fires; and to secure adoption of such other measures as may be needed in particular forest regions to stop denudation. It will also aid States and private owners in restocking lands already denuded, where tree growth will not come back of itself."(2)

After World War I, a spirit of cooperation between Forest Service leaders and forest industry personnel gradually developed. This relationship along with the good rapport with the forestry associations created a favorable atmosphere for passage of the Clarke-McNary Act.

On October 15, 1920, a conference of interested agencies and individuals was held in New York City to discuss the forestry legislation situation and to arrive at common agreement for a national forestry program. The plan was to enlist the support of forest landowners, forest industries, forestry associations, and the general public.

Organizations represented at the meeting were: American Forestry Association, American Newspaper Publishers, American Paper and Pulp Association, Association of Wood-using Industries, U.S. Chamber of Commerce, National Lumber Manufacturers Association, Western Forestry and Conservation Association, National Wholesale Lumber Dealers Association and the U.S. Forest Service. This indeed was an impressive assemblage of top-level representatives from powerful organizations.

It was a fruitful meeting which resulted in the formation of the National Forestry Program Committee to further an adequate national forestry policy. Members of the committee were: R. S. Kellogg (News Print Bureau), W. B. Bullock (APPA), E. T. Allen (WFCA), Philip Ayres (Society for the Protection of New Hampshire Forests), Elbert Baker (American Newspaper Publishers Association), Wilson Compton (NLMA), Hugh Baker (APPA), John Foley (Association of Woodusing Industries), P. S. Ridsdale (AFA), and J. R. Williams (National Wholesale Lumber Dealers Association). The committee did its job well and was instrumental in promoting Federal forestry legislation up to, and including, passage of the Clarke-McNary Act.

The primary interest of the forest industries was to obtain more Federal funds for forest fire protection, forest survey, research and other forestry measures which did not involve public controls over private timber cutting operations.

In the closing hours of the last day of the 68th Congress, the long-awaited legislation was passed. The Clarke-McNary Law was signed by the President on June 7, 1924. Those, inside and outside the government, who had worked for the legislation, were triumphant. It was at this time that Chief Forester Greeley made his oft-quoted statement, "After four years of controversy, it was a great thrill to be in on the kill -- even if the victory was bloodless."

The Clarke-McNary Act opened a new era in national forestry policy. Although it covered a broad span of authorizations, the cardinal feature of the act was the recognition of the important role of private forestry in the Nation's forestry policy. Section 2 of the act authorized the Secretary of Agriculture to expand Federal aid to the states in carrying out their forest protection systems. It removed the former Weeks Law restriction that Federal cooperative fire control funds could be used on forested watersheds of navigable streams. Under the new Act, consideration was given to the protection of any timbered or forest producing lands, other than those in Federal ownership. Federal funds must be matched with state expenditures, including certain expenditures of private owners for the protection of their lands.

It soon became clear that several amendments to the Act were desirable. The first concerned protection of non-timbered watershed lands. Extensive areas of brush and grassland in the western states were in need of fire protection to safeguard high-value watersheds. It was ruled by the solicitor of the Department of Agriculture that

the Secretary was without authority to apply provisions of the Act to these non-timbered lands. To correct this situation Congress passed legislation which added to the qualifying areas originally specified under section 2 the following phrase: "or watersheds from which water is secured for domestic use or irrigation." This amendment became law on March 3, 1925.

A second amendment became necessary to facilitate the financial handling of cooperation with the states. On April 13, 1926, legislation was passed giving direct responsibility to the State Forester or other appropriate state official for verification of matching expenditures and the former burdensome and impractical fiscal procedure was removed.

The new Act gave impetus to the states already cooperating under the Weeks Law and encouraged other states to enter the cooperative program. Fire protection was not the only cooperative program to benefit from the Clarke-McNary Act. Cooperation in reforestation and forest management was also stepped up. It authorized Federal cooperation with the states in the procurement and distribution of forest tree seeds and plants for the purpose of reforesting denuded lands on farms. It also authorized cooperation with the states in advising and assisting farmers in establishing, improving and renewing woodlots, shelterbelts, and other valuable forest growth. Five years after the passage of the Act, 39 states were cooperating with the Forest Service in forestry programs.

The appropriation for cooperative fire control was increased the first year from $260,000 to $660,000 (F.Y. 1926). By the third year it reached the $1,000,000 mark. Then followed a period of very slow increases in appropriations; not until F.Y. 1939 did the funding reach $2,000,000. During the same period, the state and private expend itures had risen from $1,874,894 to $6,616,909.

Another section of the Clarke-McNary Act dealt with a critical obstacle to good forest management--tax laws. Section 3 authorized expenditure of Federal funds to study tax laws and their effects on forest land management. Risk from fire was not difficult to understand, but risk from excessive taxes on forest land was more subtle; fire was more spectacular than taxes.

The tax problem was, and still is very complex. Forest management is a long term venture. Private forest landowners are vulnerable to substantial tax increases during the course of a rotation that couldspan generations. Owners of destructively logged land faced long-term investments in reforestation and stand improvement plus taxes over a long period. Then too, the local governments might raise taxes after reforestation. Many owners of forest land believed it was more prudent to sell their logged-off land and purchase land supporting standing timber, rather than face the risks of increased tax levies and fire.

Lumbermen claimed that uncertainty of future taxes on their land deterred long-term investments in forest management, and current high taxes were an incentive for a "cut and get out" policy.

In 1925, Professor F. R. Fairchild of Yale University began a ten year study of forest land taxation. A noted authority on forest land taxation, Fairchild had some question regarding the lumbermen's claim that they adjusted logging schedules because of taxes on their land. Assembling a staff of 17 technical personnel, primarily foresters and economists, Fairchild began an extremely thorough investigation of state and local forest land taxes.

The report, published in 1935, was the most valuable tax study available at that time. Briefly, Fairchild found that the lumbermen's claim that they were forced to liquidate their holdings because of excessive tax burdens was not quite true. Reforestation of the land was, however, definitely deferred by the tax situation. (3) The Fairchild report gained little attention; nor did the report prove of any value to Section 3 of the Clarke-McNary Act. The Forest Service did make a major effort to deal with the problem of property taxes nevertheless, because it was considered to be a matter of major concern to forest land owners and managers.

Historically, the Clarke-McNary Act is undoubtedly one of the most important pieces of forestry legislation enacted in America. It was the capstone of Greeley's Forest Service career and a big step forward in the Federal-state cooperative forestry venture.

Greeley resigned from the Forest Service on April 30, 1928, to bring to a close a brilliant career in public service. He accepted the position of executive secretary of the West Coast Lumbermen's Association to the surprise of many; but to those who were closest to him, it was inevitable. He had been offered many high-level administrative positions, some with much higher salaries than he received from the Forest Service. The Board of Directors of the American Forestry Association passed a resolution which stated that Greeley's resignation was an "irreparable loss" and referred to "the unreasonable heavy personal sacrifices" Greeley had made as Chief of the Forest Service. (4)

Irrespective of the important progress in forestry legislation, fires continued to sweep over a vast area of forest land each year. Especially in the South. In the ten-year period of 1917-1926, eighty percent of all the fires in the nation occurred in the southern states. One-third of the southern pine area had been logged-over and burned repeatedly. Forest fire had become a major problem in the South, destroying a resource base for forest industry, creating unemployment, contributing to southern poverty and causing wide-spread flooding and soil erosion.

Generations of rural southerners had grazed their livestock on the open range in the woodlands, irrespective of ownership. The common practice, to obtain early grass and more forage, was to set fire to the woods periodically, without respect to an adjacent landowner who may be trying to raise trees. Thus, the selfish interests of the user of open range in the woodlands, repeatedly damaged a great resource belonging to all Americans.

Tree-hungry sawmill owners were moving in droves from the northern states to the South. A swarm of small, portable, "peckerwood" mills voraciously worked their way through Missouri, Arkansas, Tennessee, the Carolinas, Mississippi, Alabama, Georgia and Florida.

Richard McArdle, former chief of the Forest Service, recently discussed his recollections of devastation during this period:

> "When I got out of the army after World War I, I found a job with the Roper Lumber Company. When I left this company in 1920 and went to Ann Arbor to enter the forestry school, I rode the Roper log train sixty-five or seventy miles across some of the most gosh-awful cut-and-burned country you ever saw. This was in

eastern North Carolina. At that time, the forests of the Northeast had been logged over. So had the Lake States pineries. The South was pretty much cut out, and heavy cutting was picking up speed on the West Coast. I hadn't seen the Northeast then, but I had seen much of the South where logged-off lands were burned and reburned until you could see nothing but stumps for long distances. In the early 1920s, I saw the northern part of Michigan's lower peninsula and this was pretty much the same picture as the South. A few years later, I saw the same thing in Minnesota and Wisconsin." (5)

The southern states were having their problems during this critical period in forestry history. Not until 1926 did the stripped, barren acres of the Missouri Ozarks get any attention whatsoever. In that year, a young man, Paul Dunn, was named district forester for the Missouri Department of Agriculture, working under the supervision of State Forester Frederick Dunlap. The young forester went on to become one of the most prominent foresters in America, but working out of Ellington, Missouri, his efforts were like raindrops in the ocean -- scarcely noticable.

Until June 1930, the Missouri forestry program limped along, sustained by Clarke-McNary funds. Two or three fire towers were erected -- then came complete collapse. The office of State Forester was abolished. Not until 1936 did Missourians vote to amend the state constitution to establish a Conservation Commission. In 1938, the Commission appointed George O. White as chief of forestry. One of his first acts was to enter into cooperative agreements with the Forest Service for fire control and tree production. Within a short time, five young foresters were hired to take over the fire districts. There lay before them the heartbreaking and overwhelming task of suppressing forest fires on the vast area of private land in the Ozarks of Missouri. Overcoming the fire problem in Missouri must have built character as most of these five young foresters (William Towell, Arthur Meyer, Charles Kirk, August Schmidt, and Edward Seay) have become well known in forestry circles.

In many states, forestry legislation was passed, but funds for carrying out the duties and responsibilities were not provided. Tennessee, for example, passed an "Act for a General Forestry Law" as early as 1907. But no funds were provided. The legislature, in 1909, suceeded; an Act was passed calling for an investigation of the forests, streams and water powers of the state. In 1914, four years

after publication of the report, a forester, R. S. Maddox was finally employed. This marked the beginning of organized forestry work in Tennessee, and Maddox became the first State Forester. By the end of 1922, with the collaboration of the Forest Service under the Weeks Law, Tennessee had created a forest fire control organization to protect 5,000,000 acres of forest land.

Kentucky showed little interest in protecting and managing its forests until 1905 when Congress authorized the Forest Service to cooperate with the states in surveys of forest conditions. A small appropriation was provided by the legislature to provide for a survey in Kentucky.

Nearly a billion feet of lumber were cut from the forests of Kentucky in 1907. The virgin old-growth was being exhausted and the condition of the remaining forests was deteriorating rapidly. Perhaps the turning point in Kentucky was the report on the survey which had been made by professional foresters. The survey found the forests of Kentucky were in poor condition due to overcutting and fire. It prescribed improved practices and protection under an organization headed by a competent, technically trained and experienced forester. As a result of the study, a State Forester, John Earle Barton, was appointed. Barton accomplished little due to a lack of staff and funds. The Weeks Law funds helped, but it was to be many years before Kentucky developed an efficient fire control organization.

The Carolinas were having their troubles too. A few fire laws were on the books in the early years, but they were meaningless. In North Carolina, a "Forest Fire Bill" was passed in 1915. It established the office of State Forester and Fire Warden. J. S. Holmes was hired as the first State Forester. Like many other state legislatures, the North Carolina body provided no money to carry out a program. Thanks to the Weeks Law, Holmes was able to work with the Forest Service in establishing a skeleton organization. From this humble beginning, the North Carolina Division of Forestry has grown into a highly efficient organization which protects private forest land and provides woodland management services throughout the state.

At the turn of the century, South Carolina's lumber industry was at the peak of production, but some far-sighted individuals were beginning to have some concern for the future timber production. In 1910, South Carolina published a bulletin written by W. M. Moore of the U. S. Forest Service; "The Forest Conditions of South Carolina" contained sound recommendations for protection and management of South Carolina's forests, which brought about the introduction of a Bill in 1912 to create a State Forestry Department. The Bill lacked public support, however, and was cursorily dismissed.

In January 1924, William Greeley, Chief of the Forest Service, was invited to speak before the general Assembly of South Carolina. Greeley said, "The end of the great pineries of the South is near. Today, the mill owners are bound for the last standing area of timber which lies west of the Mississippi. There is no need to regret having utilized our forests as we have. Any vigorous and energetic race would have done the same. But we need to begin reforestation."

Not until 1927, however, was a bill passed creating a State Commission of Forestry. The Governor sent word to the House that if there were any appropriations included in the bill, he would veto it. Thus it passed without any appropriation. The following year, the legislature did appropriate a small amount and the money was used to hire South Carolina's first State Forester, Lewis E. Staley.

Georgia's extensive forests were still largely unprotected and unmanaged in the twenties. One forester who left his imprint on Georgia was Austin Cary. From 1917 to 1936, Cary was a logging engineer in the U. S. Forest Service. He worked on the ground with forest landowners and forest industries in Georgia and other southern states. There are literally hundreds of forest plots all over Georgia which still show his influence.

Charles F. Evans was another forester who made a major contribution in Georgia, as well as other southern states. He arrived in the South in 1927 and in 1934 became Assistant Regional Forester in the Division of State and Private Forestry of the U. S. Forest Service. He served here continuously for 16 years until his retirement. Through his efforts and the help of many others, the Georgia Forestry Department was created in 1925.

Florida's timber supply seemed inexhaustible. Yet by the early 1900s, loggers, turpentine operators, and cattlemen had reduced Florida's great stands of pine to barren acres, over-run by scrub oak and wire grass. The farmers added to the destruction. They burned the woods to kill snakes and to drive out screw worms, boll weevils, ticks, gnats, and other insects. Annual burning of the woods was common practice among the farmers and cattlemen.

By the mid-1920s, many people were beginning to worry about where all the abuse of Florida's forests was leading. A group of Floridians, feeling the time had arrived to do something, banded together in 1923 and formed the Florida Forestry Association. They worked with the state legislature which finally enacted a law in 1927 creating the Florida Board of Forestry. Florida's first State Forester was Harry Lee Baker, formerly district inspector with the U. S. Forest Service. Soon after his appointment, Baker entered Florida in the Federal-state cooperative program and began to build an effective fire control and management organization.(6)

In the Washington Office of the Forest Service, the Branch of Forest Management, with E. E. Carter in charge, continued to exercise broad direction of state and private cooperation with J. Girvin Peters, chief of the Division of State and Private Forestry, in direct charge. Federal administration of the Clarke-McNary program followed the same general pattern set up for the Weeks Law. As additional states came into the program, it became necessary to make adjustments, both in Washington and the field offices. The growing and distribution of forest tree planting stock in cooperation with the states under the new law was handled, at first, by the same staff responsible for the cooperative fire control program. Peters was assisted by Claude R. Tillotson, Gordon T. Backus and Louis Murphy.

Alfred B. Hastings, who had resigned from the Forest Service in 1916 to serve as acting state forester in New Hampshire, reentered the Forest Service in 1925 and joined the Washington inspection staff. Harry Lee Baker also joined the staff in 1925, resigning in 1928 to become State Forester of Florida.

When Greeley resigned in 1928, Robert Y. Stuart was made chief of the Forest Service and Peters was promoted to head of the Branch of Public Relations which included the Division of State Cooperation, then headed up by Hastings. In October 1928, Peters died and Fred Morrell, district forester from Missoula, Montana, became branch chief.

In 1935, a Branch of State and Private Forestry was created in the Washington office. Earl Tinker, regional forester in Region 9, was appointed as the first head of State and Private Forestry with the rank of assistant chief. Tinker resigned in 1940 to accept a position as executive secretary of the American Paper and Pulp Association. He was succeeded by E. I. Kotok (1941-1944), R. E. McArdle (1944-1952), W. S. Swingler (1952-1964), B. L. Rasmussen (1964-1967), E. M. Bacon (1967-1972), T. C. Nelson (1972-1974), and Philip L. Thornton, present Deputy Chief.

When the Clarke-McNary Act first became effective, the Forest Service carried on the cooperative programs through two distinct types of field inspection districts. The Washington Office districts were supervised directly from the Division of State Cooperation in Washington. The regional inspectors operated out of the Forest Service regional offices.

In order to develop mutual confidence and understanding between State and Federal foresters, the Forest Service adopted a policy of holding frequent meetings with state forestry personnel. Important policy and procedure decisions governing Federal-state cooperation were preceded by frank discussions between the Federal and state officials. Meetings and conferences were held, as needed, for this purpose. Included were annual conferences with all cooperating State Foresters as well as meetings with the Executive Committee of the National Association of State Foresters. Group meetings between regional office foresters and state forestry personnel were also held.

The Clarke-McNary Act authorized an annual appropriation of $100,000 for cooperation with the states in the production of nursery stock for the establishment of windbreaks, shelterbelts, and plantations on farm lands. It was a miserly appropriation but it was enough to stimulate action by the states. Many new state nurseries were established and old ones were expanded. By 1930, state nurseries were distributing almost 26 million tree seedlings annually under section 4. of the Act.

LITERATURE CITED

(1) Earl S. Peirce and William J. Stahl, Cooperative Forest Fire Control,A History of Its Origin and Development Under the Weeks and Clarke-McNary Acts, 1969.

(2) USDA Circular 112, Timber Depletion and the Answer,1920.

(3) Fred R. Fairchild, Forest Taxation in the United States, USDA Misc., Pub. #219, 1935.

(4) Resolution in Minutes, Board of Directors, March 21, 1928, Records of The American Forestry Association.

(5) Dr. Richard E. McArdle: An Interview with Former Chief, U. S. Forest Service, 1952-1962, Conducted by Elwood R. Maunder, Forest Hist. Soc.

(6) Ralph R. Widner, Forests and Forestry in the American States, The National Association of State Foresters, Washington, D.C., 1968.

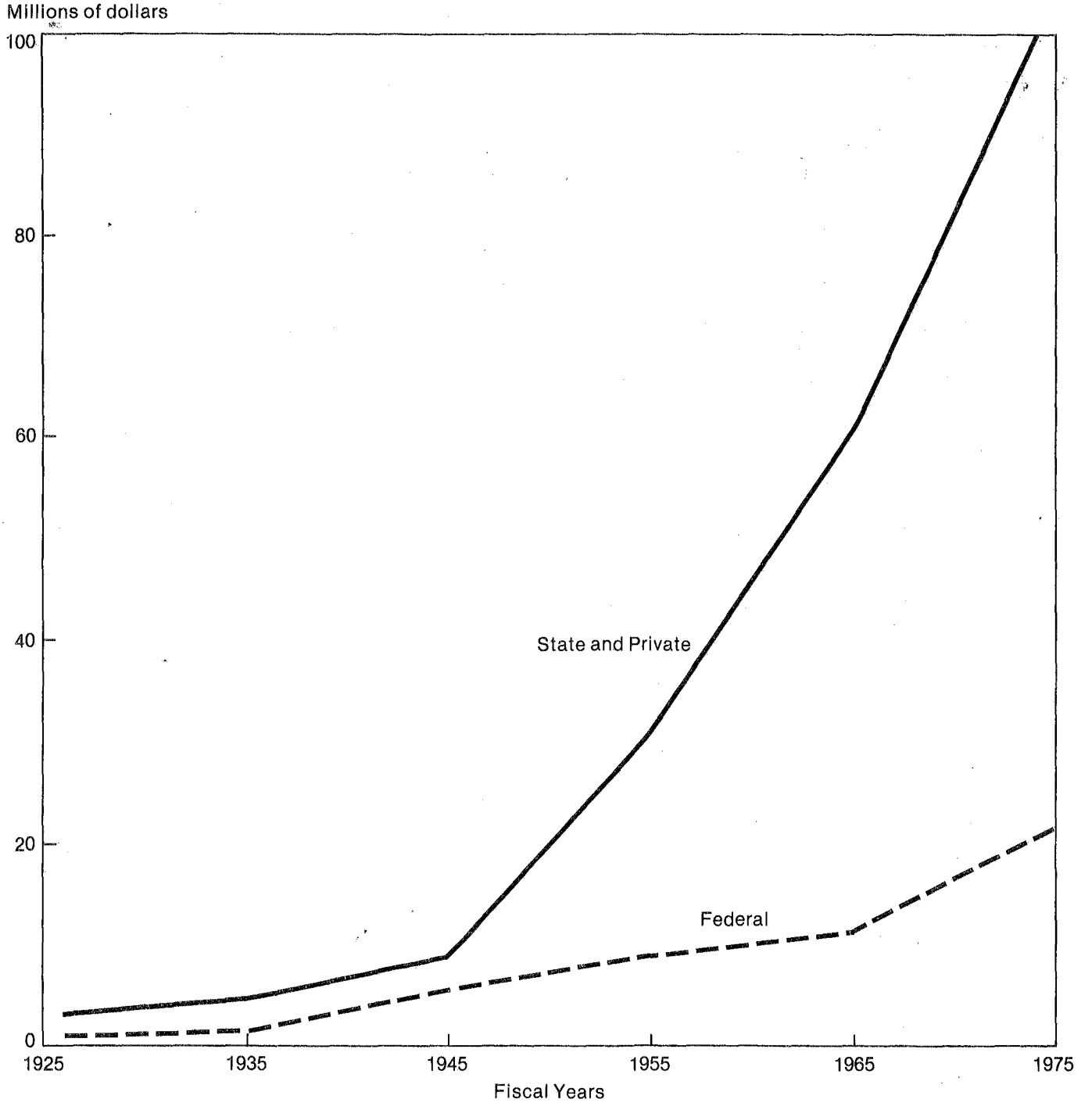
Chapter V

Emergency Programs During the Great Depression

In 1931, twenty years after the passage of the Weeks Law and seven years after enactment of the Clarke-McNary Act, eight states had not yet established a forestry department. In spite of all the efforts by many, inside and outside the Forest Service, these eight states (Arkansas, Utah, Iowa, North Dakota, Nebraska, Wyoming, Kansas and Arizona) had no part in the Federal-state cooperative program. Even those states with authorized fire control programs were unable to stop fire from ravaging millions of acres of forest each year. In all parts of the Nation, extensive areas of cutover and prime timber lands were burned indiscriminately. For example:

> At high noon on August 14, 1933, a perspiring runner was sent into the woods with orders to close down the last logging operation in the Gales Creek Canyon in northwestern Oregon. The trail was rough, the going slow and tortuous. A suffocating East wind sucked the last remaining moisture from the fir needles. The humidity read 20 percent. The forest floor was dust dry. The moss and fern hung lifelessly.
>
> At the spar tree, the crew sensed danger and were preparing to shut down. One more log, the super said. One more log, the rasp of steel cable against a dry stump, the crunch of wood against wood, a trickle of smoke and a fire that 3,000 men could not put out.
>
> In the next 11 days, the largest and most destructive fire that had occurred in Oregon since the Coos Bay conflagration in 1868 raged across the Coast Range. Crowning through the finest stand of virgin timber remaining in the state, it laid waste 240,000 acres of prime forest land.
>
> The Tillamook burn spread to include the Wolf Creek burn just to the North, which burned at the same time, and the Salmonberry burn which occurred in the late fall the year before, all covering 311,000 acres of forest. More than 12-1/2 billion feet of green timber were destroyed. Total value at pre-war prices was estimated at $20,000,000 and about $100,000,000 some 20 years later."(1)

Forest Fire Control (CM-2) Cost of Protection



Sources: CFFC Statistics.

In Minnesota, despite a cooperative Federal-state-private program to prevent and control fires, damage continued to mount and the control organization proved inadequate.

> "An unprecedented drouth in the early 1930s increased the fire hazard and proved once more that the state forest service was still under-manned and its appropriations wholly inadequate to cope with the gigantic problem of preventing and suppressing fires on millions of acres of forest land. In 1931, nearly a million acres burned and another three and one-half million acres were damaged. This was the year of the Red Lake fire which burned an area from Waskish to the Canadian border."(1)

Wisconsin and Michigan were also experiencing disastrous fire throughout their cutover pine lands. State suppression organizations were unable to control the fires that swept over millions of acres; their task being made greater by public apathy and insufficient funds. In Arkansas, Charles Gillett, at that time extension forester, pointed out the terrible economic losses Arkansas was needlessly sustaining because of incessant forest fires.

During this bleak period, the state of Virginia had run into financial difficulty within its forestry organization. Some progress had been made in the construction of new fire towers and in equipping the fire force, but the organization faced a severe trial in 1930. There were 2869 fires in 1930 and the 1931 appropriation was exhausted by October. The drouth continued into 1931. The Virginia Forest Service was broke and in debt. Some of the cooperating counties were staggered by the costs of suppresssion in 1930. Forest fire control in the Dismal Swamp had to be discontinued in May 1931 as there were no longer funds with which to pay fire fighters. The fires of 1930 and 1931 had run into astronomical suppression costs.

To make matters worse, the historic business depression had fastened a strangling grip on the economic life of the nation. The so-called "Great Depression" created a serious set-back to the struggling state forestry organizations. Appropriations were drastically reduced and support for forestry expenditures with the state legislatures reached a new low.

By 1931, the great depression had created serious unemployment in all states. The American Forestry Association and other conservation groups advocated forest protection and improvement work with pubic funds. The state of Connecticut was the first to attempt unemployment relief by public works in the forests. Pennsylvania, California and New York followed suit with small conservation work programs.

Franklin D. Roosevelt, then Governor of New York was exposed to the program in his state. He was particularly impressed with the possibilities of reforestation as a means to provide jobs and, at the same time, rebuild a great resource.

Roosevelt had personally practiced forestry on his 1,200 acre estate at Hyde Park; professional foresters had drawn up a forest management plan that called for planting trees and making improvement thinnings. For 15 years he had been taking a personal interest in this work.

Upon his nomination for the presidency of the United States on July 2, 1932, Roosevelt stated in his acceptance speech that reforestation was the kind of public work he favored.

On a cloudy and cheerless day in Washington on March 4, 1933, FDR took the oath of office. Then he turned with chin outthrust, face grave and spoke in a high, ringing voice. He expressed hope and confidence to the millions who listened at their radios throughout the nation, "So, first of all, let me assert my firm belief that the only thing we have to fear is fear itself--nameless, unreasoning, unjustified terror which paralyzes needed efforts to convert retreat into advance." The crowd before him stirred somewhat to the words, "Our greatest primary task is to put people to work!" He closed his remarks with a plea for divine guidance.

On March 21, 1933, the President asked for quick authorization of a Civilian Conservation Corps (CCC) for the purposes of both reforestation and humanitarianism. This bill interested FDR himself as much as any single measure in his recovery program. It was designed to employ a quarter of a million young men by early summer, doing work such as fighting forest fires, planting trees, and building dams. Congress pushed the measure through in ten days by voice vote.

In some future year, when a comprehensive history of conservation in America is recorded, the CCC will be recognized as one of the major benefits. No conservation work program had ever brought about more good to the forests of this nation.

William B. Greeley

Chief Forester 1920-1928

Young men between the ages of 18 and 25 were drawn from the big city slums and the depressed rural areas across the country. In 1935, at the height of the programs, 2,650 camps were operating with 500,000 men. Each enrollee received board, lodging, work clothes, medical care, and the grand sum of $30 a month for his labors.

Each camp was set up for 200 men with a military officer in charge. All work on conservation projects was supervised by a camp superintendent, an experienced technician--usually a forester or an engineer. Under him were three to five technical assistants, usually young foresters. The CCC was active for nine years (1933-1942), during which time three million young men were given employment in healthy outdoor work. The total cost of these immeasurable benefits to the nation's renewable resources and the youth of America was only $2-1/2 billion.

Space does not permit a list of all of the work done by the CCC for the protection and improvement of the forests. One of the major accomplishments was the suppression of forest fires on over a million acres. CCC also built fire breaks, erected lookout towers, built access roads, planted millions of trees, made improvement cuts on tens of thousands of acres, erected telephone lines, built administrative structures, and developed recreation areas for public use. Who can measure in dollars, the benefits of this program to present and future generations of Americans?

Although the Civilian Conservation Corps was carried out wholly with Federal funds, its activities were not restricted to government-owned lands. Because of the close working relationships between the Forest Service and the state forestry departments, it was possible to bring the states into the CCC program from the start. Under general supervision of the Forest Service, the state forestry departments, and through them, private forest owners, benefitted from the CCC camps. In 1935, there were 390 state forest camps and 243 camps working on private forest land. In Indiana, for example, there were 24 such camps. They established temporary nurseries, distributed 3,385,000 tree seedlings, and planted 38,000,000 young trees on private lands in total.

In Arkansas, it was the CCC that made the Forestry Commission a success. Here, they erected 14 new steel fire lookout towers, built 500 miles of road and 762 miles of telephone line. But most important to the state of Arkansas was the more than 100,000 man-days contributed to the suppression of forest fires throughout the state.

The state of Iowa had, for many years, graduated foresters from Iowa State College at Ames but, until 1934, the state had no forestry department or State Forester. G. B. MacDonald was appointed as the first State Forester in that year, and plunged immediately into a state-wide CCC program. Sixteen camps were established initially for work in state parks and on private land. State Forester MacDonald served as director of the Iowa CCC program, and the number of camps in Iowa grew to a total of 45.

Since Federal funds were restricted to certain uses, the state cooperated in financing the program in order to secure benefits of a more lasting nature. MacDonald appeared before both branches of the Iowa legislature in April, 1935, to make an appeal for supplementary state financing for the program. As a result, the General Assembly appropriated a total of one million dollars for the program--a most generous appropriation for the conservative state of Iowa. These funds were used by MacDonald to purchase about 12,000 acres of state forests and parks. Among the acquisitions, was the largest remaining stand of native white pine in the state.

The Lake States, New England, the southern states and the west all reaped long-lasting benefits from the Civilian Conservation Corps program. The inventory of fire control improvements constructed on state and private holdings, for example, is impressive. It included 1,314 lookout towers, 315 lookout dwellings, 39,430 miles of telephone lines, 43,782 miles of truck trails, 8,247 miles of foot trails, and 42,708 miles of firebreaks. Fire hazards reduction work was completed on over a million acres. But the most striking contribution of the CCC was that it provided trained and well-equipped fire fighting crews. Almost 2,293,000 man-days were devoted to fighting forest fires. Many states owe a large part of their fire protection improvements to CCC.(1)

The notable accomplishments of the CCC gave President Roosevelt great satisfaction:

> "Roosevelt, in fact, was an eminently practical man. He had no over-all plans to remake America but a host of projects to improve this or that situation. He was a creative thinker in a `gadget' sense; immediate steps to solve specific day-to-day problems. He had ideas such as the tree shelter belt in the drought areas; huge dams and irrigation systems; resettlement projects for tenant farmers; civilian conservation work in the woods; a chain of small

> hospitals across the country; rural electrification; regional development; bridges; house and parks. Not surprisingly, virtually all these ideas involved building tangible things. What excited Roosevelt was not a grand economic or political theory but concrete achievements that people could touch and see and use."(2)

The owners of private and industrial forests were stimulated by the work of the CCC; the improved fire protection, reforestation, and stand improvement created a new attitude. George Vanderbilt, owner of Biltmore and Pisgah forest had watched his forests grow and improve during the twenty-five years between the time of acquisition and his death. During this time he frequently expressed the feeling that the ownership of forest lands entails certain definite responsibilities to the public. Vanderbilt was one of those who held that the private ownership of any resource necessary to the general welfare carries with it the moral obligation of faithful stewardship to the public.(3)

Forty years after Pinchot had recommended acquisition of the Pisgah forest lands to Vanderbilt, he returned to examine the forest:

> "I tramped down from Pisgah ridge through the old Big Creek operation. The Poplar reproduction we had tried for was there in great abundance. I was profoundly delighted, as I had a right to be, with the stand of young Poplar that dated from our marking and cutting."(4)

There were disappointments in the Vanderbilt venture. The markets for some forest products were poor and some operations ended up with a net loss. By the time Pinchot's crop of second-growth yellow poplar had matured, however, there had been a vast improvement in the market and the profit from the forest operations under the Forest Service. During these years, the growth of industrial forestry had been painfully slow. In December, 1930, the Society of American Foresters issued a little publicized report on industrial forestry. It revealed that only 9 percent of the nation's industrial forest holdings were under forestry management.

In fairness to the forest industries, it should be pointed out that protection--or lack of protection--against fire had been a discouraging factor. Timber-growing was still a risky business. Not only fire, but insects and disease were frequently equally destructive. W.B. Greeley observed, "Forest industry must see more stable timber values ahead; must get a grip on the fire problem."(5) The same attitude prevailed with many smaller private forest land owners. The tax situation was also a deterrent to investment in forest management by private forest owners.

In spite of the many negative factors, the atmosphere for adequate forest management of private forests was improving. The Weeks law laid the foundation for Federal-state cooperation and materially increased the acreage of private lands under protection from fire. Then the Clarke-McNary Act gave impetus to this protection and provided funds for the growing of tree seedlings by state nurseries for distribution to private land owners. Now, the CCC greatly strengthened the state fire protection organizations. The reduced risk of losses from fire greatly increased the interest of private forest owners in practicing forest management. It was at this time that the forest industries also began to move in this direction.

The National Industrial Recovery Act of 1934-35 provided good forestry practices in forest industry codes. Although this Act was declared unconstitutional, work on the codes was beneficial in giving lumbermen a better understanding of the meaning of sustained yield management and the benefits of working together.

All of the motivating factors were falling into place. Serious stumbling blocks still remained, however. The forest industries were hiring foresters and moving toward forest management, but the costs of protection, taxes, and cultural treatment were still prohibitive to many private forest land owners. They were dubious about making a long-term investment in forestry when other investments offered quicker returns.

The "Copeland Report" in 1933 estimated that only 146 technically educated foresters were employed by 79 companies. The SAF survey in 1934 showed that, of their membership of 2,076 foresters, only 220 were privately employed. A similar survey in 1937 revealed that 369 of their members were in private forestry work, some were merely land surveyors. This slow increase in the number of foresters in private work indicates there was no mad rush to expand forest management operations on private land during these years. Nevertheless, interest was growing, however slowly.

The Great Depression brought an end to some budding industrial forestry programs. Viewed in retrospect, however, the economic gloom of the 1930s did bring about advances in private forestry beyond the benefits of the CCC and stronger state protection organizations.

> "The lean years caused many changes in the ownership of large forested properties, particularly in the West, but in other regions as well. In many areas, large acreages of timber lands reverted to county ownership for nonpayment of taxes. In other cases, ownership of weakly held timber properties was ultimately transferred to stronger, more stable management, the result being a boost for industrial forestry. When economic conditions brightened, many companies with enlarged holdings were in a better position to take steps toward regulation of their cut for continuous timber production than they had been previously.
>
> Another factor deserving of mention as an indirect influence on industrial forestry development was the rising tide of conservation sentiment during the first decades of this century, quite well known to those who were engaged in land management. Industrial timberland owners, as a group, gradually became aware that they were confronted with a public and a government aroused to the point of action of some sort to correct the `wasteful practices' of earlier lumbering days. The often subtle but very real pressure certainly stimulated the timber industry to take a careful look at more conservation-based operating proceedures. This was especially true when it could be shown that many of these practices really constituted `wise use' of the timber resource, and helped to provide a continuous raw material source for the expanding forest products industries."(6)

The threat of public regulation of cutting on private forest lands lurked in the shadows, and this too prompted the forest industries to at least make a show of using "improved practices" on their woodlands. Many forest industry leaders were not convinced that forest management would pay its way, but the pressures of public opinion were growing rapidly. Forest "devastation" was now an ungly word to Americans.

Robert Y. Stuart, Chief of the Forest Service, died suddenly in 1933 and was succeeded by Ferdinand A. Silcox. He immediately launched a three-point program: (1) increased public cooperation with private owners in the application of forestry practices, (2) increased public acquisition of forest land, and (3) regulation. A questionnaire sent to the State Foresters revealed that a majority favored regulation as a last resort, and if adopted, it should be by State or local action with Federal cooperation--but not with Federal control.

In 1937, the Norris-Doxey Farm Forestry Act was passed. Its principal objective was to improve forestry practices on small farm woodlands. It authorized appropriations of up to $2,500,000 a year to provide advice, investigation and plants for farmers, in a cooperative program with the States. In the fiscal year of 1948, the Forest Service cooperated in 173 farm forestry projects located in 650 counties in 40 States.

> "A defect in the Norris-Doxey Act was its failure to define the role and authority of the land-grant colleges vis-a-vis the State forestry agencies. This issue was centered in the kinds of forestry services these agencies should provide to the private forest owners. It was resolved in 1948 by a joint policy declaration by the Association of Land Grant Colleges and the Association of State Foresters. All forestry educational activities that did not involve direct service to landowners on the ground would be carried on by the extension services. Service performed in the management, harvesting, and marketing of products would be the province of the State forestry agencies."(7)

The Norris-Doxey Act, with its benefits to small farm woodlands, was indicative of the growing belief that the small forests were of much greater importance than had been thought. The owners of larger tracts, the lumbermen with their vast cutover lands were conspicuous. The millions of acres in National Forests and the extensive industrial forests would seem to be the major sources of future timber supplies. But were they? Forest survey projects were showing strong evidence that the majority of the Nation's timberlands were held in small tracts by farmers and other individual owners.

Up to 1940, only a mere handful of these millions of small forest owners were managing their woodlands properly. In many cases, these small forests were not the principal source of income for their owners; there was little incentive to spend time and money on them. Farmers, in particular, were not concerned with their woodlot. To them it was a source of firewood, fence posts and a few sawlogs. Certainly, not a part of the farm in which to invest time and money.

Doctors, bankers and other professional people who purchased small tracts of forest land, were usually seeking a place to hunt, fish and relax, or they were speculating. Forest management was not in their plans, nor did they have a knowledge of forestry. A few planted conifer seedlings for Christmas trees. A great many more did absolutely nothing in the way of forest management.

"Peckerwood" sawmills moved over the South, the Midwest and the East like locusts, skinning off the small forests, leaving only the brush and defective trees. When they moved on, many of the forest tracts were left in such a condition that they would not produce another crop without reforestation. Forest management was being practiced on the National Forests, the State forests and some industrial forests--but the small woodlands were being systematically downgraded or devastated over the entire Nation.

In March 1938, President Roosevelt sent a special message to Congress recommending a study of the forest situation by a joint committee of both Houses, to form a basis for policy legislation relating to cooperation of the Federal Government and the States with private forest owners. He also proposed that the committee consider the need for regulatory controls and the extension of public ownership.

The committee was appointed, held hearings at various places, and produced a report in 1941. Among other things, the report recommended Federal financial assistance to the States for regulation of forestry practices, but it did not suggest additional Federal acquisition of forest land.

Meanwhile, the regulation squabble continued. Greeley, speaking for the Pacific Northwest forest industries, agreed that some form of regulation might be necessary, but emphasized that protection from fire was the first requirement to advance forestry. In May 1940 the AFA magazine, American Forests, entered the fray again with an editorial which urged industry to "accept the proposition that Federal financial aid for forest protection, reforestation and management benefitting private owners be contingent upon satisfactory guarantees that forest devastation will cease and private forests will be handled by practices to assure continuous forest growth." The Forest Service, as its part, should agree to a try-out period of five to ten years of State regulation without provision for Federal step-in.

Silcox died in December 1939 and was replaced by Earle Clapp as acting Chief. Clapp immediately picked up the banner of Federal regulation and waved it boldly. In spite of his efforts, when the United States entered World War II the regulation issues remained a standoff. In January 1943, Lyle F. Watts became Chief. He faced many war-time problems; loss of key personnel, cuts in appropriations, and greatly increased demands for wood to meet vital military and civilian needs. Wood became critically important to the Armed Forces engaged in a mobile war on far-flung fronts.

A Timber Production War Project (TPWP) was created in 1943. This project, frequently referred to as "TeePee WeePee" was a cooperative program between the Forest Service and the War Production Board. It proved highly effective in the war effort by stimulating production of lumber, veneer, pulpwood, and other vital forest products. Many of the States were tied into the program, working closely with the TPWP personnel. Although skeptical at first, loggers, sawmill operators, and other forest workers soon found that the TPWP organization could help them obtain scarce gasoline, tires, trucks, and other equipment needed to keep up their production.

In the summer of 1944, Watts asked Richard E. McArdle to become his Assistant Chief for State and Private Forestry cooperation. McArdle's background had been almost all Research, but he moved into the new assignment with vigor, working for increased appropriations and new S&PF legislation, including the Cooperative Forest Management Act.

In the mid-1940s, the forest fire problem still lingered in America. There had been, admittedly, some hard-won advances, but the fire losses annually, throughout the Nation, were still running into millions of dollars. The American Forestry Association continued to carry on its valiant battle against forest fires. At its annual meeting in 1940, AFA reiterated that forest fires were the greatest single factor responsible for the devastation and understocked condition of the Nation's forests. That year, State expenditures exceeded by more than threefold the Federal contribution to the CM-2 cooperative fire control program. They called on Congress to appropriate, without further delay, the full amount of $2-1/2 million authorized under the Act. The Association further urged that the Federal contribution be increased to $9 million annually. This was done four years later.

In 1946, the third American Forestry Congress was held in Washington, D.C. The Congress made three strong recommendations concerned with improving fire protection: (1) adequate funds, (2) extension of protection to all lands not presently under organized protection, and (3) the establishment in each State of a representative citizen's committee to provide educational leadership in fire prevention.

Not only the American Forestry Association was concerned. State and Forest Service fire control leaders realized that the long campaign to protect the Nation's woodlands from fire was far from won. Incendiarism was on the rise, and law enforcement organizations in the States were under-staffed and under-financed. New suppression techniques were helpful to the man on the fire line, and sophisticated equipment was knocking down fire faster than ever. Advancement in aerial detection was exciting. Aircraft as a primary detector of fires was coming into use, and many of the States were obtaining their own patrol planes. In spite of these advances, the most difficult round in the fight against forest fire was still ahead.

Progress was discouragingly slow in the Southern States. In 1940, a district forester in Missouri returned to the lookout tower with two of his men after many exhausting hours of firefighting. They climbed the tower and looked out over the Ozark hills to see smoke in all directions. Wearily, the forester turned to his men and said, "Well fellas, let's pick out a small one and go put it out." A young forester in Mississippi took a job in another State because, he said, "Fires day and night, week after week, were driving me crazy."

Even the CCC could not keep up with the ever-burning woods fires. The American States still had a fire problem that was many years from solution.

LITERATURE CITED

(1) Ralph R. Widner, Forests and Forestry in the American States, The National Association of State Foresters, Washington, D.C. 1968.

(2) James MacGregor Burns, Roosevelt: The Lion and the Fox, New York, 1956.

(3) Overton W. Price, George W. Vanderbilt, Pioneer in Forestry, American Forestry, Vol. 20, No. 6, June 1914.

(4) Gifford Pinchot, Breaking New Ground, Harcourt, Brace, New York, 1947.

(5) A Decade of Progress in Douglas Fir Forestry, (Seattle; Joint Committee on Forest Conservation, Foreword), 1943.

(6) Henry Clepper and Arthur Meyer, American Forestry, Six Decades of Growth, (Paul M. Dunn and Robert S. Hyde, Industrial Forestry), Society of American Foresters, Washington, D.C., 1960.

(7) Henry Clepper, Professional Forestry in the United States, Resources for the Future, Inc., Washington, D.C., 1971.

Chapter VI

The Cooperative Forest Management Act

And Additionial Advances

During the heyday of the Civilian Conservation Corps, cultural practices on American forests reached an all-time high. Reforestation and nursery production were greater than ever dreamed of prior to the CCC. Planting for the period of 1933-1939, public and private, totaled 1-1/4 billion trees. The Prairie States Forestry Project started in 1934 to establish shelterbelts on the treeless prairies of the West. When the project was closed in 1942, almost 223 million trees had been planted in 18,600 miles of shelterbelts on private farms and ranches from Canada to Mexico.

In 1945, the Forest Service undertook a new appraisal of the timber resources of America. The purposes were to bring basic information on timber resources up to date, to interpret this information in relation to the national economy, and to re-examine national needs in conservation. This study revealed that the crux of the problem was (as many forestry leaders had suspected) in the small private holdings--not in the large forests owned by goverment and industry.

Some State Foresters and Forest Service S&PF staff were aware of the importance of small woodlands and had been working toward better protection and management of these lands. In October 1935, the Association of State Foresters made three recommendations at its annual meeting: (1) that the Federal authorization for fire control under Section 2 of the Clarke-McNary Act be increased, (2) that the Section 4 authorization be extended to non-farm lands, and (3) that provision be made for furnishing technical assistance in forest management and utilization on small private woodlands.

In April 1936, Senator McNary and Congressman Doxey introduced bills which included the recommendations of the State Foresters in addition to measures dealing with National Forests. The two bills provided for a CM-2 fire control authorization of $5 million, plus $1 million for insect and disease control. They also included a new authorization for cooperation with the States in a forest management and utilization program. However, there was no final action on either of these bills.

In May 1936, the Secretary of Agriculture pointed out to President Roosevelt that Congress had failed to provide for continuation of the Shelterbelt Project. In subsequent discussions, the President decided that legislation for this purpose should be broadened to include farm forestry on a nation-wide basis.

To accomplish this, Senator George Norris introduced S. 4723 in June of 1936, and it was passed by the Senate that month. Congressman Jones of Texas introduced a companion bill, HR 12939, which failed to pass before Congress adjourned. In the fall of 1936 numerous meetings were held in an attempt a get agreement on cooperative farm forestry legislation similar to the Norris-Jones bills. Representatives from the Forest Service, the Association of State Foresters, State Extension Services, Land-Grant Colleges and the Association of Commercial Nurserymen attended.

At the Association's annual meeting in 1936, the State Foresters again considered needed forestry legislation, giving special attention to Forest Service proposals for farm forestry. Several State Foresters expressed resentment because they were not consulted prior to the introduction of the Norris-Jones bills. They further specifically stated that any future legislation should be worded to provide for management work on private forest land being done by and through the State Foresters.

In January 1937, Senator McNary introduced S. 903 which became known as the "State Foresters Bill." It provided for (1) authorization of $10 million for fire control, $1 million for insect control, and $50 thousand for taxation and insurance studies, (2) broadened CM-4 to include non-farm lands, (3) increased the authorization CM-5 (Extension) to $250,000, and broadened the scope to include havesting and utilization aid to farmers, and (4) added a new CM-10 to provide for cooperation through the State Forester in forest management and utilization service to private forest owners.

In February Senator Norris and Congressman Doxey introduced companion bills which were passed in both Houses and the Norris-Doxey Cooperative Farm Forestry Act was signed by the President on May 8, 1937.

In December 1937, State Foresters and Extension Service representatives met in the office of Assistant Secretary of Agriculture Brown to work out a policy to govern division of work under the Norris-Doxey Act. There could be no meeting of the minds on the line between "education" and "action" work, but agreement was finally reached on a policy which would permit each State Forester and each State Extension Director to agree on how to handle Norris-Doxey activities in his State.

Secretary Wallace made a sudden move in October 1938 which turned the administration of farm forestry programs under Norris-Doxey over to the Soil Conservation Service. The SCS plan for carrying out the program was through direct Federal action, radically different from the procedure agreed upon by the Forest Service, the State Foresters and the Extension Service. The State Forester's Association vigorously protested this action with the result that administration of the farm forestry projects was turned back to the State Foresters, but the farm foresters continued as Federal employees. The divided responsibility between the Forest Service and the SCS for administration of the cooperative program proved to be so confusing that the Secretary transferred all functions of the Norris-Doxey Act back to the Forest Service on July 1, 1945. One month later, authority was granted to the Forest Service to operate the Norris-Doxey farm forestry work on a reimbursement basis comparable to the procedure used in CM-2 work.

In October 1944. Perry Merrill, State Forester of Vermont and President of the Association of State Foresters, asked the Forest Service for suggestions on legislation to provide technical assistance for forest management to small woodland owners and aid to small processors of forest products.

At the annual meeting of the Association in 1945, Merrill as President and Joseph F. Kaylor as Vice-President were asked to arrange a meeting with representatives of the Department of Agriculture and forest industry groups to seek agreement on desired forestry legislation. At this same meeting of the Association, organized forest industry had repudiated its previous commitment to "support in each forested State a competent, adequately- staffed and financed State forestry organization qualified to manage state-owned lands, to administer and enforce state laws relative to privately owned forest lands, and to provide cooperation with all timberland owners in solving forestry problems."

R. S. Black, representing the Forest Industries Council, told the State Foresters in blunt terms, "If you don't play ball the way industry wants, we will throw our support to the State Extension Services." The following week, Black went before the Committee on Extension Organization and Policy in Chicago and offered it the support of organized forest industry. Merrill and Kaylor immediately arranged a meeting in Washington. Others who attended were representatives from forest industry and the Forest Service. The participants could not, however, reach agreement on policy.

The failure of organized forest industry to give its wholehearted support was difficult to understand. A program devised to bring about increased volumes of quality timber products would provide long-range benefits to forest industry in assured raw material sources.

During 1946, State Foresters and Forest Service S&PF staff considered various proposals for Federal-State cooperative forest management assistance. The Forest Farmers Association, representing a dozen southern States, became an active participant in the preparation of a program, at this time.

At the 1946 annual meeting of the Association of State Foresters, a resolution was adopted outlining the major principles to be used as a guide in drafting a bill, and the Executive Committee was instructed to draft a proposed bill and get it introduced. The resolution was:

SUGGESTED PRINCIPLES OF FEDERAL LEGISLATION TO PROVIDE AID IN FOREST MANAGEMENT TO PRIVATE FOREST OWNERS:

The Association of State Foresters believes that a program of cooperative technical forestry assistance is necessary as the next step in solving the Nation's forest problem. To implement this program, the Association recommends that legislation be enacted embracing the following principles:

1. That the cooperative work on a State level be handled on the Clarke-McNary pattern.

2. That no direct action projects be established in a State until that State is ready to finance its share and to administer the project.

3. That the U. S. Forest Service provide experts for field assistance on major projects and provide research facilities and technicians.

4. That expenditures for (3) shall not require matching by the States.

5. That the field work shall cover technical forestry services.

6. The Executive Committee is hereby instructed to draft and introduce Federal legislation to accomplish this end.(1)

On April 22, 1947, a committee consisting of State Foresters Ralph Wilcox, Indiana; Stanley G. Fontanna, Michigan; C. H. Flory, South Carolina; J. M. Stauffer, Alabama; W. K. Beichler, North Carolina; and A. J. Tomasek, Illinois, met in Washington and agreed to recommend a draft of a bill to the Association for action at the 1947 annual meeting. The draft was presented and favorably received. The Association then voted to draw up a bill similar to the draft and have it introduced.

Here the matter lay until the annual meeting in 1948. During this interim, major attention had been given to development of a memorandum of understanding between the Association of State Foresters and the Association of Land Grant Colleges concerning the division of forestry activities by these two organizations. It appeared to be a necessary preliminary to proposing legislation. Final action on this statement of agreement was taken by the Association of State Foresters at their 1948 meeting; the Land Grant College Association voted to accept the agreement at its annual meeting one month later.

This joint policy agreement resolved long-standing differences over the types of services each should provide to private forest owners. Under the joint policy statement, the extension services of the State agricultural colleges had the responsibility for educational assistance; the State forestry departments were responsible for providing technical assistance to landowners. This memorandum of understanding proved beneficial almost immediately when the two influential associations gave their united support to pending legislation.

In December 1948, an enlarged Executive Committee of the Association of State Foresters met in St. Louis. Here they voted to join with the State Extension Services in promoting Federal forestry legislation covering (a) an increase in the CM-2 authorization to $20 million, (b) a revision of CM-4 forest planting to authorize $2-1/2 million and broadening to include non-farm lands, (c) clarification of the language of CM-5 to make it plain that educational work is intended, and (d) make provision for forest management service work.

On month later, Kaylor, as chairman of the The Association of State Foresters' legislative committee, and Symons, as chairman of the Land Grant College Association forestry committee, consulted Congressman Sikes on the best strategy to use in getting jointly-sponsored legislation introduced. The Congressman said he intended to introduce an omnibus forestry bill within a few days and offered to introduce instead the State Foresters and Extension Services proposals, provided they gave him a draft of proposed legislation immediately. Kaylor consulted with his committee by phone and two days later he and Symons delivered a draft of a four-section bill to Congressman Sikes.

Other Congressmen also introduced similar legislation; all told, 28 bills on these four measures were introduced in the house. H.R. 2296 introduced by Congressman Granger (Chairman of subcommittee of the House Committee on Agriculture) was selected for final consideration by the House.

On February 24, 1949, the Granger subcommittee held hearings on H.R. 2296 and related bills. More than 50 Congressmen testified in favor of the bill. Kaylor and Fontanna testified for the State Foresters, Symons and others testified for Extension Service. Representatives of the Forest Farmers Association, the Turpentine Farmers Association and several pulp and paper companies spoke in favor of the bill. The only opposition came from representatives of the National Lumber Manufacturers Association.

On March 30, 1949, Senator Aiken introduced S. 1458 for himself and Senators Russell, Thye and Gillette. This was the companion bill to H.R. 2296. Senate hearings were held on S. 1458 on May 25, 1949. USDA representatives supported the bill. Kaylor and Symons explained how the State Foresters and the land grant colleges had developed the bill. Several people spoke favorably before the committee. The

representatives of organized forest industry appeared in force and insisted on reading lengthy statements opposing all items of the bill. Only the remaining stigma of public regulation could possibly explain such short-sighted action on the part of industry, in view of the long-range benefits they would derive from the program.

Two representatives of the Consulting Foresters Association opposed section 4, and the Commercial Nurserymens' Association opposed the planting section. In spite of the opposition, the bill was considered in the Senate on August 9, and passed. The first meeting of the House-Senate conferees resulted in no agreement. At a second meeting on October 12, they came to agreement and the Senate approved the conference report on October 13, followed by approval in the House on October 17. On October 26, 1949, the amended Clarke-McNary Act became law.

Thus, after five years of unrelenting effort on the part of key individuals the bill became public law. Bitter feelings on the part of organized forest industry and forestry consultants had hindered progress and delayed final action, but now increased authorizations had passed, particularly for expanded nursery production and increased appropriations for services to farmers in the harvesting and marketing of forest products.

During this period, the forest products industry, in order to change its public image as devastators of the forest, organized the American Forest Products Industries, Inc. In 1968 the name was changed to the American Forest Institute. The organization used public relations methods to show that the industry was committed to sustained yield forestry. They created the "Certified Tree Farm" program in 1941, which has grown to include 35,000 tree farms with a total of 76 million acres in 48 States.

During this progress in forest management on private lands, fire was still sweeping over much of the forested land throughout the Nation. In 1947, when the State of Maine suffered appalling losses from forest fires, the Northeastern States determined it was high time to work out a cooperative plan of protection among the States to cope with emergencies.

"Through the New England Governors' Conference, a meeting of public officials was called to work out a mutual, cooperative plan of forest fire protection in case of an emergency. It was decided at this, and several follow-up meetings, that some permanent agency be set up which would serve to integrate the fire protection services of the several States into a cohesive and organized pattern.

"Federal enabling legislation (Public Law 129, 81st Cong.) was passed by Congress in June 1949, and by January 1950, the 'compact' was ratified by the 7 States (6 New England States and New York). The directing agency is a commission composed of the State Forester and two other members from each State. The commission is given power to study and make recommendations to the member States with regard to problems connected with the prevention and control of forest fires and the measures, legislative and administrative, that should be taken to meet these problems. Among its specific duties is the formulation of a regional forest fire control plan which shall serve as a common plan for that area.

The compact obligates each member State to put into effect a forest fire plan for that State; to take measures as may be recommended by the commission to integrate such plan with the regional forest fire plan; and, upon the request of a member State, to render all possible aid to the requesting agency which is consonant with the maintenance of protection at home.

"The compact provides for expansion by permitting any State contiguous to a member State to become a party to it. Supplementary legislation (Public Law 340, 82nd Cong.) provides that any of the Canadian provinces adjacent to member States may participate in the compact."(2)

R. M. Evans, former Forest Service Regional Forester, was appointed by the commission as the first executive secretary in May 1950. He resigned in 1952 and A. S. Hopkins replaced him. The third executive secretary, Milton C. Stocking, was appointed in 1963. Other inter-State compacts were organized later, on a somewhat different basis. In the late 1960's, a National Fire Emergency Program was proposed, the details of which will be discussed at length later in this chapter.

The Executive and Legislative Committees of the Association of State Foresters met in December 1949, and decided to press for new Federal legislation to provide forest management services on small forest ownerships. In their consideration of a draft bill they consulted the NLMA, the Consulting Foresters Association, and several members of Congress. State Foresters also met with representatives of the American Pulpwood Association and the American Pulp and Paper Association. In January 1950, Kaylor and Merrill, in behalf of the Association of State Foresters, gave Congressman Granger the draft of a bill which was introduced without change by Congressman Sikes as HR 6741.

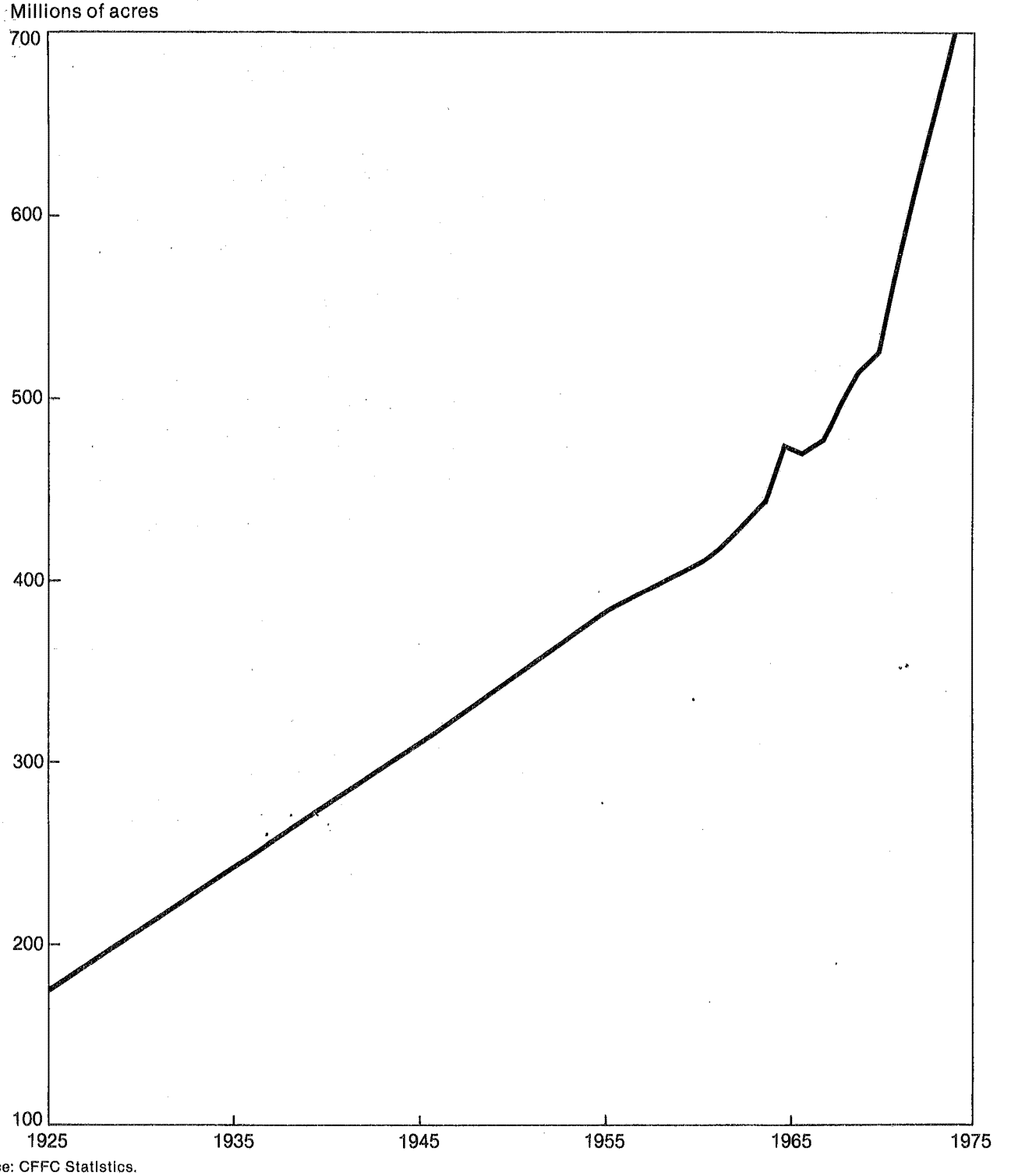
In February, a meeting was held to resolve disagreement on the wording of the bill. Those present were: Watts and McArdle of the Forest Service, Kaylor and Merrill of the State Foresters' Association, and representatives of the Consulting Foresters Association, the National Lumber Manufacturers Association, and the Southern Pine Association.

Several key changes were agreed upon and the revised version of the Cooperative Forest Management Program was agreed upon.

The proposed Bill authorized the Secretary of Agriculture to cooperate with the States and Territories to enable them to provide technical services to private forest landowners, operators, and processors of primary forest products. The purposes of these services were to bring about improved management of forest lands and improved efficiency in the harvesting, marketing and processing of forest products. It authorized the sum of $2.5 million as an annual appropriation to carry out the provisions of this Act.

Passage of the CFM Act was still not assured. Fuller of NLMA had objections, saying the program was merely "pump-priming." McArdle decided to meet this remark head-on, saying, "We do not consider this to be a pump-priming program. Forest resources in adequate supply are essential to the country's welfare; three-fourths of the forest land in private ownership is in small holdings involving some 4 million owners who don't know much about timber growing and are going to need help which most of them can't get from public agencies. It is going to take more than mere pump-priming and publicity to get this job done, and it is going to take a long time to do it. The Federal Government has, and must continue to have, a large interest, just as long as forest resources are important to the Nation."

Total Acres of State and Private Land Protected Under the Clarke-McNary Cooperative Fire Control Program



Source: CFFC Statistics.

Fuller continued to talk about the interests of the lumber industry in small forest ownerships. McArdle decided to make clear just what group Fuller did represent, "You represent not more than 50 percent of the total lumber production, only 3 percent of the total number of sawmills, and less than 1/10th of one percent of the total number of private forest landowners in the United States."

"That is interesting," said Fuller.

"It is also true," replied McArdle.

Hearings on the bill were held on March 8, 1950, with considerable favorable comment and very little criticism of the bill. After some delays, the bill was passed by both houses and became law on August 25, 1950.

In spite of the difficulties encountered in preparation and passage of the bill, the CFM Act provided a strong, effective cooperative program to bring technical services to private woodland owners and operators, both in forest management and in the harvesting and marketing of forest products.

Upon the passage of the CFM Act, farm forestry (as it was then referred to) came alive. There was a quick response in State legislation and appropriations, enabling the States to qualify for the funds Congress had provided. By 1960, 46 States and Puerto Rico were cooperating in the program; more than 500 technical foresters were giving service to small woodland owners. During the year of 1959, assistance was given to 76,500 owners in the management of more than 4 million acres of woodland.

In the midwest farmlands, the program was well-received expanding rapidly as new districts were added in rapid succession. One of the best-known Forest Service trainers of farm foresters during this era was Charles Goetzen, known to the foresters as "Mr. Farm Forestry." Goetzen gathered the young farm foresters around him and explained the philosophy of successful service to farmers and other woodland owners. "In talking with farmers," he said, "you must talk their language. Talk about forest crops, harvesting sawlogs, crop trees, cull trees, and seedlings. Don't use a lot of fancy silvicultural phraseology that the farmer won't understand. After all--our purpose is to get this guy to practice good forest management in his woodlot."

Many forest owners had no idea as to the value of the trees they wished to market. The foresters gave them guidance in this area as well as helping them establish tree plantations, do improvement work in their growing stock, protect them from insects and disease, and provide access roads and fire breaks. They had to overcome a lack of interest on the part of the landowners because of the long-term investment, high taxes on the land, risks from fire, insects and disease and absentee ownership. The young farm forester faced many frustrations; the fine stand of timber he had marked carefully and supervised the cutting of last year was suddenly sold and the new owner promptly cut every remaining marketable tree. His efforts in the fields of harvesting and marketing met with even more resistance.

Low salaries were a problem in many States. The turnover of foresters exceeded 20 percent each year in some States. During this time Goetzen reviewed the work of a CFM forester in central Minnesota in 1954 and learned that the young forester was looking for another job. The forester explained that he could not support his family on the low salary he earned as a farm forester; lower than the local school janitor with a fifth-grade education, he explained.

The State Foresters and the Forest Service were equally concerned about this situation. They worked together to convince the State commissions and the State legislatures that higher wages were a necessity. In some States, the State Foresters' salaries were set so low that all foresters working under them were confronted with a low salary ceiling. By presenting the wage scales for foresters in adjacent States, it was possible to convince State officials that their wages should be comparable. In this manner, State by State, increased salaries resulted and the turnover of foresters was effectively reduced.

During this period, there were very few practicing consulting foresters in the areas where the farm foresters were stationed. Unfortunately, several influential consulting foresters in Washington, D.C., had bitterly opposed the CFM Act from the time of its conception. This attitude toward the program filtered down to the consulting foresters in the States and created ill-feeling between farm foresters and consulting foresters. Although the latter numbered few at this time, they were extemely vocal, claiming the farm foresters were giving free services to potential clients of theirs.

Most State Foresters established a maximum limit on free services by their foresters and went so far as to contract with consulting foresters to do examination and management plan work on private woodlands with State funds. This latter policy has been used more frequently in recent years. The Forest Service S&PF staff has put considerable thought and effort into improving the working relationship between CFM foresters and consulting foresters. Their attitude is that the work of these foresters is closely related and that a coordinated effort can be mutually beneficial.

As the program grew, the States gave their CFM foresters various titles: farm forester, service forester, and district forester were the most common. The work of all, regardless of title, was closely coordinated by Forest Service S&PF personnel. As might be expected, the forestry programs in some States grew strong and stable, whereas, in some more politically oriented States progress was painfully slow. The State and Private Forestry leaders in the Forest Service regional offices worked diligently to strengthen the weaker States to bring them up to the standards of the strong States. S&PF regional office heads C. C. Strong, Jay Higgins, M. H. Davis, F. W. Godden, W. C. Branch, T. H. Burgess, C. A. Hoar, C. F. Evans, J. N. Diehl, J. N. Hessel, B. L. Rasmussen, R. W. Olson, F. Albert, and M. S. Lowden did everthing possible to strengthen the weaker States during this critical period. The results were not always encouraging, but progress was made, and many of the States with the so-called weak programs of those years have strong, well administered programs today.

> "With one exception, the history of State forestry is a chronicle of ascending progress. In a few States the record is flawed by setbacks that originated, it should be noted, outside the forestry organization. In States where checks or reverses have occurred, they have almost never been the result of technical incompetence on the part of professional foresters. Not to put too fine a point on it, the recurrent blight on State forestry has been politics. And if the stultifying effect of politics is less apparent today than in earlier years, this is not to say that it has disappeared.
>
> In too many States for too many years, all forestry employees, from the indispensable field ranger to the State Forester himself, were appointed, continued in office, and were often removed subject to political patronage. No more debasing influence on the

> morale of a dedicated, ethical civil employee exists than the knowledge that, however competent his performance, his career and the welfare of his family are dependent on the favor of a political superior or a party boss. The effect has been to drive some good men out of State service, and to retain some less competent ones who were willing to obtain security and tenure through political favoritism rather than by professional merit. The worst effect of politics was the destruction of the enthusiasm that the forester normally feels toward his work. A forester who lost his job could get another. When he lost his elan, he lost his pride in accomplishment, a quality harder to recapture than a job.
>
> If there have been foresters in State service disposed to acknowledge what they believe to be the authority of political imperatives, there have been others who put professional pride first. On occasion, their adherence to the ethical standards of the profession cost them preferment and even their jobs. This is not a pleasant aspect of the history of State forestry, but it is history nevertheless."(3)

Notwithstanding the political hazards, the great majority of States have broken free of the spoils system and have developed strong, effective forestry organizations. Over the span of 6 decades, foresters, State and Federal, have learned to work together as a team. To be sure, in the early days of the cooperative program, some State Foresters were strong "states- righters" who resented the butting-in of the "Feds." At the same time, some Forest Service foresters being aware of the political situation in some States, assumed a critical attitude.

If I may write from personal experience of working closely with State Foresters over a long span of years; I recall working shoulder to shoulder with dedicated foresters in all branches of State forestry organizations. Their technical competence, particularly in recent years, has been equal to that of foresters associated with Federal agencies or forest industries. A bond of mutual respect developed between the foresters employed by the States and the S&PF foresters; a camaraderie which carried over into the after-work hours strengthened this bond. In recent years, there have been transfers of foresters between the agencies, State and Federal. The Forest Service has thought so highly of foresters in the States that they have, in some instances, taken them into high administrative positions.

The States, likewise, have taken many former Forest Service foresters into responsible positions in their organization. Thus the mixed blood has added strength and cohesion to the cooperative program.

Lyle Watts retired as Chief of the Forest Service in June 1952 and Richard E. McArdle was promoted from Deputy Chief, State and Private Forestry, to Chief. McArdle wished to continue the progress won through cooperation with the States and with private owners. He was fully aware of the struggles between various conservation interests and he planned to use his office to endow American forestry with stability and permanence. His record reflects how successful he was in carrying out these plans.

Out in the North Central Region of the Forest Service, with headquarters in Milwaukee, Wisconsin, Calvin Stott, a staff forester in the Division of State and Private Forestry, began work on his scientific approach to the inventory of timber stands. When he began work on this radical departure from other inventory methods in 1934, it gained little recognition. The system which Stott called Continuous Forest Inventory (CFI) was based on periodic measurement of permanent plots and the calculation of growth by the use of computers. In his own words, Stott defined the system:

> "It is a proportional sampling system based upon circular plots (one-fifth or one-seventh acre in size) within which all living trees 5 inches and larger (in diameter) are measured, described, recorded on punch cards or tape, machine compiled and analyzed finally in whatever segregations of the data are needed....In substance, the method results in periodic, comparable trial balances of forest growing conditions."(4)

The National Forest Timber Management Division did not consider CFI as being acceptable to its use, but the managers of industrial forests found it fitted their purposes extremely well. The Fisher Body Company adopted CFI for their holdings in the Porcupine Mountains of northern Michigan. The Goodman Lumber Company, one of the pioneers of forest management in Wisconsin, and the Ford Motor Company Woodlands Division in Michigan, also adopted Stott's system.

In the four decades since Stott conceived the idea of continuous forest inventory, it stands out as the most widely received and recognized forestry system conceived by a Forest Service employee, as applied to industrial holdings. It is used in the Lake States, Central States, Southern States, New England and Canada - over 50,000 permanent plots on 20 million acres of forest land.

> "The growing interest in CFI as a scientific technique in forestry was indicated by the attendance at a conference on this subject held at the Ford Forestry Center of Michigan Technological University in May 1965. More than 100 participants from 22 States and three Canadian provinces were present. In addition to providing an opportunity to review progress in CFI and to examine problems of data processing, the conference served as an occasion to honor Stott, the protagonist of the movement, who retired from the Forest Service in 1965."(5)

CFI has proved valuable in upper-level management planning because machine computation gives a flexible and prompt means of determining total volume, growth, and quality in any form desired. It is not suited to use on small area units, however, nor does it furnish sufficient information for direct, on-the-ground management. CFI, nevertheless, is building up a tremendous volume of forest performance that will have substantial influence on future forest management.

The Timber Resource Review was conducted as an appraisal of the American forest situation, with a final report in 1958 entitled "Timber Resources for America's Future." In carrying out this survey, the Forest Service had the cooperation of the States, other Federal agencies, and forest industries.

The most significant national problem pinpointed in the study was the low productivity and lack of management on the small woodlands which made up 60 percent of the private commercial forest land in the United States. They were owned by 4-1/2 million farmers and other private owners and averaged less than 100 acres each. (See figs. 6 and 7)

McArdle had been concerned about the lack of management on the Nation's small woodlands and the fact that they were contributing far less than their proportionate share toward the timber supply and other services the forests of the Nation are expected to render. In 1958, he initiated a series of regional "small ownership conferences" under Forest Service sponsorship in cooperation with State forestry organizations, to discuss ways of improving the condition of farm woodlots and other small forest properties.

Following these conferences, McArdle set up a team of foresters in the Forest Service Division of Program Planning and Special Projects to prepare a "Small Woodlands Program for the Nation." Leonard Barrett was project head and was assisted and advised by George Burks, Arthur Spillers, James Rettie, Gordon Mark, Philip Thornton, Robert Potter and Eliot Zimmerman. After two years of study on the project, the climate for a program of this magnitude and expense was not considered to be favorable. A program involving 4-1/2 million owners of over 358 million acres proved to be extremely expensive and controversial. The program, therefore, was not proposed as a remedy to the small woodlands problem.

William Swingler, Deputy Chief, State and Private Forestry, and Arthur Spillers, Division Director of Cooperative Forest Management, were still deeply concerned about the plight of the Nation's small woodlands. They continued to strive for larger appropriations and other measures that would strengthen the services to small forest owners.

In 1947, the responsibility for disease and insect control on all ownerships, government and private, was placed in the State and Private Division of Forest Pest Control under Warren Benedict. Control of major infestations on National Forests and on State and private lands in cooperation with the States was under the broad supervision of Benedict and his staff. Under this program, the Forest Service provides training, technical assistance and Federal funds to State forestry agencies to detect and control insects and diseases injurious to the forests on State and private lands. The Forest Pest Control organization of the Forest Service is also directly responsible for protection against insects and disease on National Forests, scheduling regular aerial surveys over high-hazard areas.

Flood control and small wateshed programs were carried on in cooperation with the States and the Soil Conservation Service under the guidance of Warren Murphy, Director of the Division of Flood Prevention and River Basin Programs. Many flood prevention projects were established under the Flood Control Act of 1944. The Yazoo-Little Tallahatchie projects in north Mississippi are unique in that the Forest Service is directly responsible for carrying out the forestry aspects of the program. More than 650,000 acres of badly eroded lands have been planted to trees on the projects.

James Diehl continued the task of directing the cooperative fire control program on State and private lands. The States were beginning to make substantial increases in their appropriations for fire control. While Federal and private contributions for fire protection changed very little during the 1950-1960 decade, the total State expenditure was increased by 319 percent. There was also a notable increase in the State areas of protection; vast areas that had been without protection of any sort were gathered into the State fire protection systems during this period.

An agressive national campaign, the Cooperative Forest Fire Prevention program (CFFP) was proving very effective under the able guidance of Clint Davis. The "Smokey Bear" program, initiated in 1942, is a cooperative enterprise of the Advertising Council, the U.S. Forest Service and the State forestry agencies. During the suppression of a large forest fire in the Capitan Mountain area of New Mexico, firefighters found a badly burned little bear cub. He was nursed back to health and was flown to the zoo at Washington, D.C., where he became the living symbol of "Smokey Bear."

In 1959, a Southern Forest Fire Prevention campaign was created as a cooperative program to supplement CFFP in dealing with the serious incendiary and debris-burning fires of the South. Richard E. Hodges of Liller, Neal, Battle and Lindsey, Inc., worked closely with the Forest Service and the State Foresters to bring about further reductions in forest fires throughout the Southern States.

Richard McArdle retired as Chief of the Forest Service in 1962 and turned the reins over to Edward P. Cliff. Cliff had a background primarily in National Forest work, but he took a strong interest in State and private work, making Boyd Rasmussen his S&PF Deputy when Swingler retired. E. M. Bacon replaced Diehl as Director of Cooperative Forest Fire Control when Diehl retired in 1964 and Edward Grest replace Arthur Spillers as Director of Cooperative Forest Management when Spillers moved up to become assistant to Rasmussen.

In 1966, the Forest Service made a major change in the State and Private Forestry field organization. Region's 7 and 9 S&PF offices were combined to create the Northeastern Area with headquarters in Upper Darby, Pennsylvania; Region 8 S&PF was removed from the regional office and set up as the Southeastern Area with headquarters in Atlanta, Georgia. Some minor changes in borderline States were also involved. James Vessey transferred from Regional Forester in Atlanta to Area Director in Upper Darby. E. M. Bacon was sent from Director of CFFC in Washington to Atlanta as Director of the Southeastern Area. Eliot Zimmerman was brought in from Assistant Regional Forester, Region 9, Milwaukee, to replace Bacon as CFFC Director.

During the late summer of 1967, more than 300 fires burned through the Western States causing tremendous loss of resource values. The Forest Service, Division of Cooperative Fire Control, working closely with a group of concerned State Foresters, developed a draft of a proposal for a "National Fire Emergency Program." The objective of the program was to attack a disaster-type forest fire, in any State, with a massive force of manpower and equipment to prevent great loss of life and property. Any fire, in any State, that became an emergency situation would be attacked with forces from adjacent States by Federal, State and private firefighting organizations under interstate and interagency agreements. The proposal was an expansion of the interstate compact philosophy to nationwide application.

At the National Governors' Conference on October 20, 1967, a resolution noted that the fire emergency quickly exhausted the available manpower and money resources in the sparsely populated areas of the West. The Governors called on the Congress of the United States to enact legislation, before the 1968 season, which would make available to the States the services and resources of the Bureau of Land Management and the Forest Service when fires raged beyond the control of the abilities and resources of the States.

At the annual meeting of the National Association of State Foresters held in October 1967, the National Fire Emergency Program proposal was presented. The State Foresters presenting the proposal stated, "Our greatest need is to prepare, in advance, a plan that will unite the efforts of all fire control organizations--Federal, State, county, and private --whenever forest fire emergencies exist or threaten." After considerable discussion, the matter was tabled pending further study.

The American Forestry Association again rose to the occasion and sought ways to bring action on what it considered to be an important national forestry problem. American Forests published several timely articles under the caption "Disaster Fires--Why?" and William Towell, in 1968, called together a task force to discuss a "National Program for Wildfire Control." The need for national action was explained in an editorial Towell wrote for American Forests in July 1968.

The AFA-sponsored task force consisted of Towell, as chairman, Joseph W. Penfold, Izaak Walton League and chairman of the Natural Resources Council of America; Gordon K. Zimmerman, National Association of Soil and Water Conservation Districts; Osal B. Capps, National Association of State Foresters; Arthur M. Roberts, Western Forestry and Conservation Association; John Muench, Jr., Forest Industries Council; James A. Johnson, National Governors' Conference; Ernest J. Palmer, Bureau of Land Management; and Eliot W. Zimmerman, U.S. Forest Service.

As a result of the report of the task force, the AFA presented a proposed outline for a bill to deal with disaster fires. This bill and subsequent bills introduced in Congress, failed to get the support needed for passage.

After World War II, property excess to the needs of the military, but useful to the cooperative Federal-State forest fire control program, became available. James Diehl worked out the arrangements and surplus government property became an important adjunct to the Federal funds available through the Clarke-McNary Act. As this program evolved, it became possible to make Federal surplus equipment available to communities and other local entities who, through written cooperative agreements with the State Foresters, agreed to suppress woods fires.

Administration of this latter phase quickly brought attention to the difficulties many local rural fire organizations faced in financing adequate equipment purchases for structural fire suppression. Dispersed rural populations and small towns did not provide the tax base needed for protection of homes and farms, although the people involved, mostly volunteers, did wonders with what they had.

The need for further strengthening of both wildfire and structural fire control in rural areas became sharply defined during the period when Boyd Rasmussen served as Deputy Chief and E. M. Bacon was in charge of the Cooperative Forest Fire Control Program. The problem became more critical when Bacon became Deputy Chief and Eliot Zimmerman took over as Director of CFFC, all during the tenure of Edward Cliff as Chief.

The need for action became apparent and the evolution of the Rural Fire Protection Program began. A program was developed by the Forest Service and enabling legislation was proposed to the Department of Agriculture. Many months of work were required to prepare the proposal for submission to the Budget Bureau for clearance. In accordance with established practice, that agency sent the proposal to other interested agencies for comment. The Department of Commerce immediately registered objections because of an ongoing fire study which was considering, among other things, a proposal for Federal grants to all firefighting forces, urban and rural. This program, if approved, would have been administered by the Department of Commerce. In any event, this objection quashed approval of the Forest Service proposal and it lay dormant for several months.

During this time, John Baker had served as Assistant Secretary of Agriculture in charge of a group of Agencies--including the Forest Service. He was displaced with the election of former President Nixon and moved to the staff of the Senate Agriculture Committee. Baker understood and supported the Rural Fire Protection proposal and, in his new capacity, enlisted the support of Senator Hubert Humphrey. As a result of his efforts, the program was included in the Rural Community Fire Protection Act of August 30, 1972.

For the past two decades, cost-sharing for forestry practices has been available to farmers and small forest owners as an incentive to good management. The program is administered by ASCS with the Forest Service having technical responsibility which is shared by the State forestry agencies. Funds available for the program were limited, however, and accomplishments have been far below the need.

Recognizing the inadequacies of this ACP program, efforts were initiated in 1968 to formulate a program to adequately improve forest conditions on small ownerships. Initially, a committee of concerned USDA agencies (FS, ASCS, FES, and SCS) was formed to outline the needs and determine appropriate roles of each agency. Following initial discussions, the State Foresters, through their executive committee, were brought into the discussions in recognition of their major role in a program that might evolve. Over a period of several months, a program was formulated. During the latter stages, Kenneth Pomeroy, chief forester for AFA, was an active participant and made important contributions. A proposal and justification was sent to the Budget Bureau followed by an extended period of budgetary review.

During this period, Pomeroy, recognizing the need for greater exposure of this program and other aspects of the small woodland problem, organized the "Trees For People" task force.(6) Membership included the full range of conservation interests. The primary focus of this group became support for legislation that would implement a Forestry Incentives Program (FIP). When Pomeroy outlined the need and opportunity to several members of Congress, Congressman Sylces in the House and Senator Humphrey in the Senate drafted legislation and secured its passage in both houses of Congress.

The Forestry Incentives Program, with substantial appropriations, has brought about encouraging expansion of management practices on private woodlands. Thornton, who was appointed Deputy Chief, S&PF, in 1974, being convinced of the value of the incentives program, worked closely with the State Foresters, ASCS, and others, to expand and strengthen the program.

In 1972, the American Forestry Association scheduled its annual meeting at New Orleans as a National Tree Planting Conference. One justification for the conference was the enormity of the tree-planting task facing the Nation. Seventy million acres of private forest land were still idle because of inadequate regeneration.

John McGuire, Chief of the Forest Service, revealed that during the decade of 1960-1970, 1-1/2 million acres per year were planted to trees. However, there still remained a serious regeneration gap on the 300 million acres of small holdings (those under 500 acres) owned by some 4 million individuals. Out of the conference came pledges by the States, Federal agencies and industrial owners to plant 40 million acres of trees during the next ten years.

Genetically superior trees are being grown in the nurseries in rapidly increasing numbers; the States will soon be producing 100 million genetically improved seedlings, annually. This assures the planting of more tree seedlings of superior genetic quality in the years to come--but good management of the Nation's small woodlands still looms as a major task ahead.

LITERATURE CITED

(1) Perry Merrill and Richard McArdle, Some Highlights in the History of Legislative Effort by the Association of State Foresters to Obtain Clarke-McNary Act Amendments, Draft, Washington, D.C., January 1950.

(2) Earl S. Peirce and William J. Stahl, Cooperative Forest Fire Control, A History of Its Origin and Development Under the Weeks and Clarke-McNary Acts, Forest Service, USDA Bul. 1964.

(3) Henry Clepper, Professional Forestry in the United States, Resources For The Future, Inc., Washington, D.C., 1971.

(4) Calvin Stott, A Short History of Continuous Forest Inventory East of the Mississippi, Journal of Forestry, Vol. 66 (Nov. 1968).

(5) Ford Forestry Center, Proceedings: A Conference On Continuous Forest Inventory, Mich. Tech. Univ., 1966.

(6) Kenneth Pomeroy and John Muench, The Challenge of Private Woodlands, American Forestry Association, Washington, D.C., 1972.

Chapter VII

Retrospect And A Look To The Future

What purpose can a historical summary serve?

The history of an organization is an integral and important part of keeping its people alive and alert to their role in the overall effort and what they need to do to accomplish their part. We cannot be guided completely by what has gone on in the past, but history does help us keep sight of the original goals of the organization and the sacrifices others have made to reach those goals.

McArdle said it very succinctly: "I think it becomes more important as an organization gets older and bigger that we shouldn't lose sight of the ideas, the ambitions, the aims, the goals, the people who had started the organization. What I'm trying to say is that you don't develop a whole new historical background for an agency every time the Forest Service gets a new Chief. That does not--certainly should not--mean that the Service abandons the ideals that the outfit started out with. We may need to modify them, change them a bit, but everybody in the organization ought always to keep those original high goals in mind. It helps create pride in the organization, helps to build esprit de corps. A historical record, especially if it's at least halfway human, can help immensely to accomplish that."

The actual practice of forestry in America started in 1892 when Gifford Pinchot applied management measures on the Biltmore Forest at Asheville, North Carolina--on private land. Even the old Forestry Division and the Bureau of Forestry, under Pinchot, devoted their efforts to initiating forest management on private lands, for the most part. The States also made preliminary moves toward forestry before the Federal Government became involved. As early as 1885, four States had created forestry agencies; true, only one of these endured to the present day, but by 1900, eleven States had set up forestry agencies.

Any search into the history of forestry in America reveals the important role played by the American Forestry Association, not spasmodically, but continuously since 1875. State forestry associations were also helpful during crucial periods--most of them were of relatively short duration--but the AFA was there to help during every critical period in the growth of forestry in America.

The history of State and Private Forestry in America is a chronicle of ascending progress. After the passage of the Weeks Law in 1911, when the State-Federal team came into being, the progress has been far beyond what the early foresters thought possible. Considering the difficulties encountered, the progress in forest fire protection has been truly remarkable. Fifty years ago, only 29 States had organized fire protection, and some of these were so poorly financed as to be almost ineffective. Just 40 years back, fires were still running unchecked over millions of acres in the West, the South, and the Lake States. When the Weeks Law became effective in 1911, only 60 million acres were protected nationwide; in 1924 when the Clarke-McNary Act was passed, this area had increased to 178 million acres. In 1974, the national total of forests and grasslands protected from fire was up to 1.2 billion acres.

Modern techniques in fire prevention, detection, and suppression have made the State fire control organizations more effective, which has resulted in decreased area burned each year. In 1968, the States, in cooperation with the Division of Cooperative Forest Fire Control, made a detailed study of the values of the resources protected from fire in all States. This "Values At Risk" study revealed that the $276 billion of resources being protected, justified much greater expenditures for protection than were currently being budgeted. These data provided justification for requests for increased appropriations.

Even though the forest fire risks have steadily increased with the growing population, between the mid-1930's and the mid-1950's alone, the acreage of timber destroyed annually by fire was reduced by half. The savings in resource values to Americans, in this period, was in the billions of dollars.

Progress in forest management on private lands, particularly since 1950, has also been impressive. Most of the industrial forests are now under capable management and the cooperative forest management program has made a start on the tremendous task of bringing good management to the small woodlands. The recent cost-sharing programs have been helpful in the latter.

Although progress has been made, the great majority of small forest ownerships are not yet under proper management to assure the Nation of adequate production of quality forest products and benefits in future years. Almost 60 percent of America's forest lands are owned by over 4 million individual small woodland owners. The Outloook for Timber in the United States released by the Forest Service in October 1973, states that future timber supplies in the United States will depend, to a major degree, on what is done on these individual forest ownerships.

In retrospect, we can be thankful that some of the bitter battles of the past have been quietly stilled and that the Forest Service, the States and forest industry have now found common goals. Strong partnerships in cooperative forestry have been forged between the Federal Government and the States, to the lasting benefit of all Americans.

The cooperative program has been steadily stretched to embrace the changing complexities of a growing, urbanized America. Forest fire protection can now be considered capable of meeting normal situations in most States. There still looms the constant danger of forest fire emergencies that are beyond the capabilities of local firefighting forces. These disaster-type forest fires are still a great destructive force capable of causing great loss of life and property when they sweep over the forests, out of control. Some form of national compact, or agreement, is needed to enable the marshaling of all surrounding forces to stop the disastrous effects of raging, catastrophic forest fires.

The "virgin" forests are gone. We are now dealing with second and third growth forests, many of which are heavily stocked with inferior species, diseased trees, and trees that have been damaged by fire in years past. There are also extensive areas where the destructive logging, fire, and neglect have left the land in a non-productive state. Total rehabilitation or reforestation is needed to bring these areas back into acceptable production--a process that is expensive and time-consuming. The challenge today, is to manage our forests for quality production by reforestation, timber stand improvement, genetics and plant breeding.

Improved utilization remains as one of the fields where the need for expansion is greatest. There are substantial areas where the level of utilization of the Nation's forest resources can be improved. The dollar return for each dollar expended in this program can be very

gratifying; moreover, it results in an improved local economy and stretches the production volume. Quality is improved and operating costs are reduced by advanced techniques in logging and manufacturing. The work done by utilization specialists in the improved utilization of small logs and more efficient processing of forest products has already brought about substantial benefits, but future years should see a considerable expansion of these efforts.

In the past, American forestry has dealt primarily with the impacts of fire and logging. Today, the problem is people and their impact on the many uses of the forest. Increasing population makes pressing demands on the forests--pure water, pure air, and a place to relax in a troubled world. As non-renewable resources of the world shrink or become depleted, the demands on timber--a great renewable resources--become more pressing.

There is satisfaction in the accomplishments of the past in State and Private Forestry, but new tasks now confront us and if we are unduly occupied with the past and our old goals, we may miss the problems of the future. Someone said, "The advancing waves of other people's progress sweep over the unchanging man and wash him out." Those who take their stewardship of the forests and related resources seriously cannot let this happen to them.

We must look ahead. If we project the progress made in the past 75 years, we can forecast many changes in the attitudes and demands of the American people. In the past, the national economy and war entanglements have brought great changes in our priorities; forestry has made advances during depressions and wars, as well as during good times. In the Great Depression, the Civilian Conservation Corps made possible tremendous advances in the protection and management of forest lands in America. The Timber Production War Project and other war programs helped advance forestry and, at the same time, made vital contributions to the war effort. During periods of prosperity, the people of America made increasing demands on the forests for building materials, recreation, relaxation, pure water, and flood prevention.

Federal and State Governments will continue to experiment and expand new cooperative arrangements which will enable them to work together toward common goals. New leaders will arise to wisely and courageously chart new courses to progressive forestry in America.

The outlook is optimistic.

APPENDICES

A-1 U.S. Forest Service Organization: Chief, Deputy Chief, State and Private Forestry, Division Directors, State and Private Forestry, by Selected Years.

A-2 U.S. Forest Service Organization: Heads of State and Private Forestry by Regions and Areas for Selected Years.

A-3 Cooperative Program Financing for Designated Years.

A-4 Map of the United States Indicating the Year of First Establishment of Administrative Commission, Board, or Department of Forestry in Each State.

A-5 Samples of Cooperative Agreement Between the U.S. Forest Service and the States, Territories and Possessions.

A-6 Laws Pertaining to State and Private Forestry.

A-1 U.S. Forest Service Organization: Chief, Deputy Chief State and Private Forestry, Division Directors State and Private Forestry, by Selected Years.

Year	Chief*	Head of S&PF*	Division Directors*
1905	Gifford Pinchot		
1910	Gifford Pinchot	William Cox	J. G. Peters
1915	Henry Graves	W. B. Greeley	J. G. Peters
1920	Henry Graves	W. B. Greeley	J. G. Peters
1925	W. B. Greeley	E. E. Carter	J. G. Peters
1930	Robert Stuart	Fred Morrell	A. B. Hastings
1935	F. A. Silcox	Earl Tinker	Earl Peirce J. A. Fitzwater Gerald Cook
1940	Earle Clapp(Acting)	Gerald Cook(Acting)	Earl Peirce J. A. Fitzwater
1945	Lyle Watts	Richard McArdle	Earl Peirce J. A. Fitzwater Howard Hopkins
1950	Lyle Watts	Richard McArdle	Earl Peirce Arthur Spillers
1955	Richard McArdle	W. S. Swingler	James Diehl Arthur Spillers Warren Benedict Warren Murphy J. F. Martin

A-1 (cont.)

1960	Richard McArdle	W. S. Swingler	James Diehl Arthur Spillers Warren Benedict Warren Murphy Edward Grest
1965	Edward Cliff	Boyd Rasmussen	E. M. Bacon Edward Grest Warren Benedict Warren Murphy
1970	Edward Cliff	E. M. Bacon	Eliot Zimmerman Robert Raisch David Ketcham Sidney Weitzman
1975	John McGuire	Philip Thornton	Willard Tikkala Russell Smith David Ketcham William Murray

* - Various titles were used over the years.

A-2 U. S. Forest Service Organization: Heads of State and Private Forestry by Regions and Areas for Selected Years.

1920

Region 1	Region 2	Region 5	Region 6
H. Flint	J. McLaren	E. I. Kotok	R. H. Chapler

1925

Region 1	Region 5	Region 6
R. Cunningham	E. I. Kotok	R. H. Chapler

A-2 (cont.)

1930

Region 1	Region 5	Region 6	Region 9
C. K. McHarg	J. H. Price	E. H. McDaniels	A. G. Hamel

1935

Region 1	Region 2	Region 5	Region 6	Region 7
C. K. McHarg	J. Higgins	C. B. Morse	H. L. Plumb	H. Hopkins
Region 8	Region 9			
C. F. Evans	A. G. Hamel			

1940

Region 1	Region 2	Region 3	Region 4	Region 5
C. K. McHarg	J. Higgins	G. W. Kimball	W. L. Robb	R. L. Deering
Region 6	Region 7	Region 8	Region 9	
H. J. Andrews	G. H. Lentz	C. F. Evans	A. G. Hamel	

1945

Region 1	Region 2	Region 3	Region 4	Region 5
C. K. McHarg	J. Higgins	G. W. Kimball	F. W. Godden	B. O. Hughes
Region 6	Region 7	Region 8	Region 9	
C. L. Tebbe	G. H. Lentz	C. F. Evans	A. G. Hamel	

1950

Region 1	Region 2	Region 3	Region 4	Region 5
C. C. Strong	J. Higgins	M. H. Davis	F. W. Godden	W. S. Swingler
Region 6	Region 7	Region 8	Region 9	
T. H. Burgess	C. A. Hoar	C. F. Evans	J. N. Diehl	

A-2 (cont.)

1954

Region 1	Region 2	Region 3	Region 4	Region 5
C. C. Strong	J. N. Hessel	M. H. Davis	B. L. Rasmussen	W. C. Branch
Region 6	Region 7	Region 8	Region 9	
T. H. Burgess	R. W. Olson	F. Albert	M. S. Lowden	

1960

Region 1	Region 2	Region 3	Region 4	Region 5
E. Juntunen	J. N. Hessel	A. G. Brenneis	E. Bacon	W. C. Branch
Region 6	Region 7	Region 8	Region 9	Region 10
T. H. Burgess	R. W. Olson	D. A. Craig	L. C. Hermel	R. L. Cooper

1965

Region 1	Region 2	Region 3	Region 4	Region 5
E. Juntunen	C. A. Yates	A. Brenneis	H. S. Coons	W. C. Branch
Region 6	Region 7	Region 8	Region 9	Region 10
E. H. Marshall	G. Allison	D. A. Craig	E. W. Zimmerman	F. T. Bailey

1970

NE Area	SE Area	Region 1	Region 2	Region 3
J. K. Vessey	D. A. Craig	J. Milodragovich	F. Kopecky	L. G. Woods
Region 4	Region 5	Region 6	Region 10	
R. S. McBride	J. D. Beebe	E. H. Marshall	C. E. Peacock	

1975

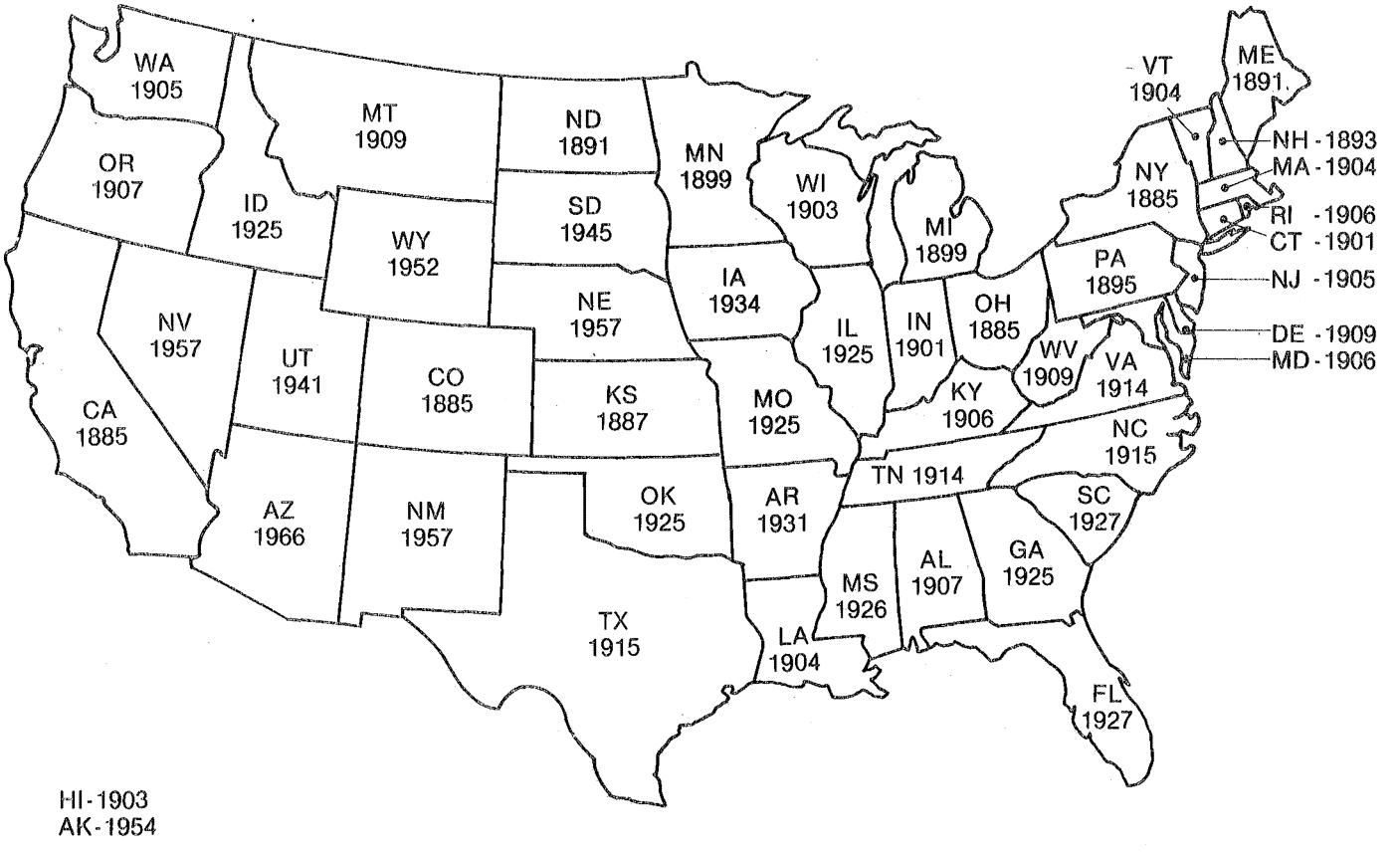
NE Area	SE Area	Region 1	Region 2	Region 3
R. D. Raisch	S. Weitzman	L. Jones	S. Hanks	T. Schmeckpeper
Region 4	Region 5	Region 6	Region 10	
M. Galbraith	J. A. Vance	F. J. Kopecky	R. C. Janes	

A-3 COOPERATIVE PROGRAM FINANCING FOR DESIGNATED YEARS

Expenditures for Forest Fire Control Under the Clarke-McNary Act

Fiscal Year	Federal Funds	State & Private Funds
1926	$585,375	$1,874,893
1930	1,252,445	4,117,652
1935	1,457,146	4,131,072
1940	1,987,537	7,200,183
1945	5,924,773	8,675,906
1950	8,550,890	20,382,635
1955	8,945,085	30,271,199
1960	9,400,959	47,240,067
1965	11,848,002	63,778,950
1970	15,264,772	97,108,499
1974	18,535,567	130,286,288

First Establishment of State Administrative Commission, Board or Department of Forestry in Each State.



A-5 SAMPLES OF COOPERATIVE AGREEMENT BETWEEN THE U.S. FOREST SERVICE AND THE STATES, TERRITORIES AND POSSESSIONS.

UNITED STATES DEPARTMENT OF AGRICULTURE

AGREEMENT

FOR FOREST FIRE COOPERATION

Under Sections 1-3, Act of June 7, 1924
(43 Stat., 653), as amended.

THIS AGREEMENT, made under authority of Sections 1-3 of the Act of Congress, approved June 7, 1924 (43 Stat., 653), as amended, this day of 19 , by and between the State of , by and through the (hereinafter called the of the first part, and the Secretary of Agriculture of the United States (hereinafter called the "Secretary") of the second part,

WITNESSETH:

WHEREAS, the said State has requested the cooperation of the Secretary in the protection from fire of timbered or forest producing lands; or watersheds from which water is secured for domestic use or irrigation; and

WHEREAS, the Secretary has found that the system and practice of forest fire prevention and suppression provided by said State meets the requirements of said Act:

NOW, THEREFORE, the said parties do mutually promise and agree with each other to maintain, in accordance with standards subsequently agreed upon, a cooperative fire protective system covering any or all private or state lands of the character above indicated within the State under the conditions hereinafter provided, to wit:

ARTICLE I. the (the acting as its agent) agrees:

1. To supervise, and to be responsible for the proper functioning of, the cooperative fire protective system:

2. To provide protection as nearly as practicable of equal effectiveness for all classes of private and State lands of the character above indicated within the areas or regions to be given protection under the terms of the protective plan hereinafter provided for;

3. To make such inspection of the work done under this agreement as may be necessary to promote the effectiveness of said work, and to acknowledge the authority of the Secretary to make similar inspections;

4. To use every proper means to bring about the active cooperation of the owner with respect to all private lands afforded protection against fire under this agreement;

5. To make, either directly or through private and other agencies under State supervision, and to render a satisfactory accounting of, all original disbursements on account of maintaining the cooperative fire protective system, subject to reimbursement by the Federal Government, as hereinafter provided, for its share of the cost thereof.

6. To submit to the Chief of the Forest Service of the U.S. Department of Agriculture:

(a) A protective plan, at such times as may be necessary, showing the location and area of private and State lands of the character above indicated which will be protected by the State, and by cooperating agencies within the State; and the character and extent of the protective measures which it is proposed to put into effect at the expense of these agencies;

(b) A budget, annually not later than May 1 of each year, showing the estimated expenditures of all of the cooperating agencies (Federal, State, and private) within the State for all fire protection purposes throughout the Federal fiscal year beginning the first day of July following and subsequently as may be necessary a statement showing any additional appropriations or sums made available for fire protection during the Federal fiscal year, or of any reduction in such sums, and of any revision of the budget thereby made necessary;

(c) A voucher, at least quarterly, claiming reimbursement from the Federal Government as hereinafter provided; and

(d) A report, annually not later than February 15, covering fire statistics, expenditures, and other information, as requested by the Chief of the Forest Service, for the preceding calendar year.

ARTICLE II. The Secretary agrees:

1. To make an allotment of funds for the purpose of reimbursing the State for the Federal share of the cost of maintaining the cooperative fire protective system during any Federal fiscal year; and

2. To reimburse the State for the Federal share of said cost on the basis of the percentage which the Federal allotment bears to the combined total of the approved State and private budget and Federal allotment; PROVIDED, the amount reimbursed by the Federal Government during any Federal fiscal year shall exceed neither the amount of the Federal allotment nor the amount expended by the State, including the expenditures of forest owners or operators which are required by the State law or which are made in pursuance of the forest protection system of the State under State supervision and for which in all cases the State renders satisfactory accounting, for its share of the cost of maintaining the cooperative fire protective system.

ARTICLE III. It is expressly understood and agreed between the parties hereto:

1. That both the and the Secretary shall have equal right to publish the results of the cooperation under this agreement: PROVIDED, that any results intended for publication, except press notices of momentary or local interest, be approved by the and by the Secretary; and that in all such publications it shall be plainly stated that the results were secured through cooperation between the and the Secretary.

2. That this agreement shall become effective and continue in force thereafter, subject, nevertheless, to the availability of funds appropriated by Congress for carrying out the provisions of Sections 1-3 of the act of June 7, 1924, as amended, and to any amendments which may be made hereof by mutual agreement of the parties; and it is expressly understood that this agreement or any modifications hereof may be terminated by either party upon thirty (30) days' written notice to the other.

No member of or delegate to Congress or resident commissioner after his election or appointment, and either before or after he has qualified and during his continuance in office, and no officer, agent or employee of Government shall be admitted to any share or part of this contract or agreement or to any benefit to arise thereupon. The provision herein with respect to the interest of members of or delegates to Congress and resident commissioners in this agreement shall not be construed to extend to any incorporated company where such contract or agreement is made for the general benefit of such incorporation or company. (Section 3741 Revised Statutes, and Sections 114-116. Act of March 4, 1909.)

IN WITNESS WHEREOF, the said has hereunto caused its name and seal to be affixed by its proper officer on the _____ day of _____ 19 , and the said Secretary has hereunto set his hand and affixed his official seal on the date below written.

(SEAL) _____

By _____

Signed and sealed by the Secretary of Agriculture this _____ day of _____ 19

(SEAL) _____

Secretary of Agriculture

Cooperative Forest Management Agreement

UNITED STATES DEPARTMENT OF AGRICULTURE
and
STATE OF_____ for
PROVIDING TECHNICAL SERVICES TO
PRIVATE FOREST LANDOWNERS AND OPERATORS
AND PROCESSORS OF PRIMARY FOREST PRODUCTS
UNDER THE COOPERATIVE FOREST MANAGEMENT
ACT OF 1950

THIS AGREEMENT is made under authority of the Cooperative Forest Management Act of August 25, 1950 (64 Stat. 473), this _____day of _____, 19____, by and between the State of_____by and through the_____ (hereinafter called the "State"), and the Secretary of Agriculture of the United States (hereinafter called the "Secretary").

The State having requested the cooperation of the Secretary in providing technical services to private forest owners and operators and to processors of forest products with respect to the management of forest lands and the harvesting, marketing, and processing of forest products, and the Secretary having found the State can cooperate satisfactorily, they do mutually agree to conduct a cooperative program for these purposes under the conditions of the following plan.

PURPOSE OF PROGRAM

To improve and maintain the productivity of forest lands in the State; to reduce wastage in harvesting, marketing, and in the primary processing of forest products; and, by so doing, assist in increasing the income and general welfare of the people of the State.

METHOD OF ACCOMPLISHMENT

Specific technical service assistance will be provided forest owners in: making simple management plans, marking trees to be cut, estimating timber volumes, proper cutting methods, marketing forest products, thinnings, planting and protection. Similar service assistance will be provided loggers and processors of primary forest products in harvesting methods and equipment selecting mill and processing equipment, mill layout, application of improved operating methods, and otherwise promoting increased efficiency in the primary processing of forest products.

This service assistance will be provided through forest management and forest products technicians to work directly (in the woods and in the mill) with individual forest owners and processors.

A manual of procedures to be used in administering this program will be developed in cooperation with the Secretary and participating States.

The State will join with other participating States in the selection of a National Advisory Board and the Secretary will consult with the board concerning the apportionment of Federal funds among the participating States, Federal administrative expenses, expenditures for special services to be provided by the Secretary, and similar administrative matters.

ADMINISTRATION AND SUPERVISION

The State will administer and supervise the cooperative program in the State, in accordance with procedures outlined in the manual.

Competent technicians will be employed by the State in accordance with the principles outlined under "Personnel Policy."

The State will be primarily responsible for locating these technicians so that the work can be handled effectively.

Periodic inspection of the work of these technicians will be made by the State. The Secretary periodically will inspect the conduct of the program by the State.

FEDERAL-STATE FINANCIAL PARTICIPATION

At the beginning of each Federal fiscal year (July 1 through June 30) the Secretary will make an allotment of funds to the State, after consultation with the National Advisory Board, for the purpose of reimbursing the State for the Federal share of the cost of conducting the cooperative program.

The State will make all original disbursements on account of conducting the cooperative program and will claim reimbursement from the Federal Government at least semiannually.

A budget acceptable to the Secretary will be prepared annually by the State. This budget will show the estimated expenditures to be made by the State during the fiscal year to provide for any substantial changes in use of funds or changes in total amount of funds available for the cooperative

work. If it becomes apparent during the fiscal year that any of the Federal funds originally allotted cannot be matched by the State, the Secretary may allot such funds to other States.

The amount reimbursed or expended by the Federal Government during any fiscal year shall not exceed the net amount expended by the State during the same fiscal year as its share in conducting the cooperative program.

Fees or other charges for work done in connection with the cooperative program will be deducted from total State expenditures, thus including only net expenditures in claim for reimbursement by the Federal Government.

The Secretary is responsible for making periodic audits of State expenditures involved in the cooperative program and subject to reimbursement by the Federal Government. The State is to maintain records in a manner that will facilitate their audit by the Secretary.

State expenditures used as a basis for reimbursement by the Federal Government under the provisions of this agreement and plan shall not be used to offset Federal funds under other agreements.

PERSONNEL POLICY

The forest management technicians (to be known as service foresters) and the forest products technicians (to be known as forest products utilization specialists) will be employed by the State. Because success of the program depends on competent personnel, the following principles will govern employment of technicians for this program:

1. Men employed as service foresters for this work shall have at least the bachelor's degree in forestry unless excepted under item 2 or 3 below.

2. Men now employed as service foresters who do not have the bachelor's degree in forestry may be retained if their work has been satisfactory.

3. In the event the State should wish to employ as service forester a man who lacks the bachelor's degree in forestry, but who otherwise is well qualified, it may do so with the prior concurrence of the Secretary.

4. Comparable requirements will apply to forest products utilization specialists.

Adequate training for the service foresters and forest products utilization specialists will be provided by the State. Whenever possible the Secretary will assist in this training work to the extent desired.

SPECIAL SERVICES

The Secretary will so far as feasible provide such special services and administrative assistance to the State and private owners as can best be provided by a central agency. Among these services would be information on improvements in procedures, tools, equipment, and techniques developed through Federal research or by other States; collecting and disseminating among all participating States progress reports, suggestions for more effective working procedures and the like; assistance in personnel training; and providing highly specialized technical advice and assistance. The States will not be required to match Federal expenditures for such special services and administrative assistance.

REPORTS

The State will maintain cumulative monthly progress summaries of cooperative work accomplishments. The Secretary will compile these individual State progress reports in a national report at least once yearly.

COOPERATION WITH OTHER ORGANIZATIONS AND PROGRAMS

The State and the Secretary may agree jointly that, under certain circumstances, effective conduct of the cooperative program will be facilitated by subsidiary agreements between legally established agencies of the State. When this is done, however, the responsibility for proper handling of the work shall remain with the State agency designated by the Cooperative Forest Management Act of 1950 as the cooperator.

Full advantage will be taken of services and assistance from other agencies of the State and Federal Government. The State will endeavor to coordinate its conduct of the cooperative program with related programs of other agencies.

MEMBER DELEGATE CLAUSE

No member of or delegate to the Congress, or resident commissioner, shall be admitted to any share or part of this agreement or to any benefit that may arise therefrom but this provision shall not be construed to extend to this agreement if made with a corporation for its general benefit.

NONDISCRIMINATION PROVISIONS

In the performance of work under this agreement, the State agrees to comply with the provisions of Executive Order No. 11246, form AD-369, which is made a part of this agreement. In this attachment, "Contractor" means "State"; "Contracting Officer" and "Contracting Agency" means "Forest Service."

By accepting this agreement, the State hereby agrees to comply with Title VI of the Civil Rights Act of 1964 and all requirements imposed by or pursuant to the regulation of the U.S. Department of Agriculture (7 CFR, part 15) issued pursuant to that act, and hereby assures, in the operation and performance of this agreement, to take, immediately, any measures necessary to effectuate this requirement. If any real property or structure thereon is provided or improved with the aid of Federal financial assistance extended to the State by the U.S. Department of Agriculture, this assurance shall obligate the State, or in the case of any transfer of such property, any transferee, for the period during which the real property or structure is used for a purpose for which the Federal financial assistance is extended or for another purpose involving the provision of similar services or benefits. If any personal property is so provided, this assurance shall obligate the State for the period during which it retains ownership or possession of the property. In all other cases, this assurance shall obligate the State for the period during which the Federal financial assistance is extended to it by this agreement. This assurance is given in consideration of the Federal financial assistance extended in this agreement to the State by the U.S. Department of Agriculture. The State recognizes and agrees that such Federal financial assistance will be extended in reliance on the representations and agreements made in this assurance. The State further agrees that the United States in addition to any other rights and remedies provided by this assurance, the Civil Rights Act of 1964, or the regulations issued thereunder, shall have the right to enforce this agreement by suit for specific performance or by any other available remedy under the laws of the United States or the State in which the breach or violation occurs.

IN WITNESS WHEREOF, the State has hereunto caused its name to be affixed by its proper officer on the _____day of _____ , 19__, and the Secretary has hereunto set his hand on the _____ day of _____, 19__.

State of_____

By_____

_____
(Title)

United States of America

By _____
Secretary of Agriculture

A-6 LAWS PERTAINING TO STATE AND PRIVATE FORESTRY

Weeks Law

Act of March 1, 1911 (36 Stat. 961, as amended)

Sec. 1. The consent of the Congress of the United States is hereby given to each of the several States of the Union to enter into any agreement or compact, not in conflict with any law of the United States, with any other State or States for the purpose of conserving the forests and the water supply of the States entering into such agreement or compact.

Sec. 2. The Secretary of Agriculture is hereby authorized, and on such conditions as he deems wise, to stipulate and agree with any State or group of States to cooperate in the organization and maintenance of a system of fire protection on any private or state forest lands within such State or States and situated upon the watershed of a navigable river. Provided, That no such stipulation or agreement shall be made with any State which has not provided by law for a system of forest fire protection. Provided further, That in no case shall the amount expended in any State exceed in any fiscal year the amount appropriated by that State for the same purpose during the same fiscal year.

Clarke-McNary Act

Act of June 7, 1924 (Stat. 653, as amended)

Sec. 1. The Secretary of Agriculture is hereby authorized and directed, in cooperation with appropriate officials of the States or other suitable agencies, to recommend for each forest region of the United States such systems of forest fire prevention and suppression as will adequately protect the timbered and cut-over lands therein with a view to the protection of forest and water resources and the continuous production of timber on lands chiefly suitable therefore.

Sec. 2. If the Secretary of Agriculture shall find that the system and practice of forest fire prevention and suppression provided by any State substantially promotes the objects described in the foregoing section he is hereby authorized and directed, under such conditions as he may determine to be fair and equitable in each State, to cooperate with appropriate officials of each state, and through them with private and

other agencies therein, in the protection of timbered and forest-producing lands from fire. In no case other than for preliminary investigation shall the amount expended by the Federal Government in any State during any fiscal year, under this section, exceed the amount expeded by the State for the same purpose during the same fiscal year, including the expenditures of forest owners or operators which are required by State law or which are made in pursuance of the forest-protection system of the State under State supervision, and the Secretary of Agriculture, is authorized expenditures on the certificate of the State Forester, the State director of extension, or similar State official having charge of the cooperative work for the State that State and private expenditures as provided for in this Act have been made. In the cooperation extended to the several States due consideration shall be given to the protection of watersheds of navigable streams, but such cooperation may, in the discretion of the Secretary of Agriculture, be extended to any timbered or forest-producing lands or watersheds from which water is secured for domestic use of irrigation within the cooperative States.

(Authority conferred by sections 1 and 2 extended to Territories by Joint Resolution of February 20, 1931, 46 Stat. 1200.) (The provisions of sections 3,4, and 5 of this Act were extended to the Territories and Possessions of the United States by Joint Resolution of April 13, 1926, 44 Stat. 250.)

Sec. 3. The Secretary of Agriculture shall expend such portions of the appropriations authorized herein as he deems advisable to study the effects of tax laws, methods, and practices upon forest perpetuation, to cooperate with appropriate officials of the various States or other suitable agencies in such investigations and in devising tax laws designed to encourage the conservation and growing of timber, and to investigate and promote practical methods of insuring standing timber on growing forests from losses by fire and other causes. There is authorized to be appropriated annually not more than $40,000,000 to enable the Secretary of Agriculture to carry out the provisions of section 1, 2, and 3 of this Act.

Sec. 4. The Secretary of Agriculture is hereby authorized and directed to cooperate with the various States in the procurement, production, and distribution of forest-tree seeds and plants, for the purpose of establishing forests, windbreaks, shelter belts, and farm wood lots upon denuded or nonforested lands within such cooperating States, under such conditions and requirements as he may prescribe to the end that forest-tree seeds or plants so procured, produced, or distributed shall be used effectively for planting denuded or nonforested lands in the cooperating States and growing timber thereon. The amount expended

by the Federal Government in cooperation with any State during any fiscal year for such purposes shall not exceed the amount expended by the State for the same purposes during the same fiscal year, and the Secretary of Agriculture is authorized to make expenditures on the certificate of the State official having charge of the cooperative work for the State that State expenditures as provided for in this section have been made. There is hereby authorized to be appropriated to enable the Secretary of Agriculture to carry out the provisions of this section not more than $1,000,000 for the fiscal year ending June 30, 1950; $1,500,000 for the fiscal year ending June 30, 1951; $2,000,000 for the fiscal year ending June 30, 1952; and $2,500,000 for each subsequent fiscal year.

Sec. 5. The Secretary of Agriculture is hereby authorized and directed, in cooperation with the land grant colleges and universities of the various States or, in his discretion, with other suitable State agencies, to aid farmers through advice, education, demonstrations, and other similar means in establishing, renewing, protecting, and managing wood lots, shelter belts, windbrakes, and other valuable forest growth, and in harvesting, utilizing and marketing the products thereof. Except for preliminary investigations, the amount expended by the Federal Government under this section in cooperation with any State or other cooperating agency during any fiscal year shall not exceed the amount expended by the State or other cooperating agency for the same purpose during the same fiscal year, and the Secretary of Agriculture is authorized to make expenditures on the certificate of the appropriate State official that the State expenditures, as provided for in this section, have been made. There is hereby authorized to be appropriated annually out of any money in the Treasury not otherwise appropriated, not more than $500,000 to enable the Secretary of Agriculture to carry out the provisions of this section.

White Pine Blister Rust Protection Act
Act of April 26, 1940 (54 Stat. 168; 16 U.S.C. 594a)

To promote the stability of white-pine forest-using industries, employment, and communities through the countinuous supply of white and sugar pine timber, the Secretary of Agriculture is authorized in cooperation with such agencies as he may deem necessary to use such funds as have been, or may hereafter be made available for the purpose of controlling white pine blister rust, by preventing the spread to, and eliminating white pine blister rust from, all forest lands, irrespective of the ownership thereof, when in the judgment of the Secretary of Agriculture the use of such funds on such lands is necessary in the

control of the white pine blister rust: Provided, That in the discretion of the Secretary of Agriculture no expenditures from funds provided under this authorization shall be made on private or State lands (except where such lands are intermingled with those which are federally owned and it is necessary in order to protect the property of the United States to work on those parts of the private or State-owned lands that immediately adjoin Federal lands) until a sum, or sums, at least equal to such expenditures shall have been appropriated, subscribed, or contributed by State, county, or local authorities or by individuals or organizations concerned: Provided further, That no part of such appropriations shall be used to pay the cost or value of property injured or destroyed: And provided further, That any plan for the control and elimination of white pine blister rust on lands owned by the United States or retained under restriction by the United States for Indian tribes and for individual Indians shall be subject to the approval of the Federal agency or Indian tribe having jurisdiction over such lands, and the Secretary of Agriculture may, in his discretion and out of any moneys made available under the Act, make allocations to said Federal agencies in such amounts as he may deem necessary for white pine blister-rust control and elimination on lands so held or owned by the United States, the moneys so allocated to be expended by said agencies for the purposes specified.

Forest Pest Control Act
Act of June 25, 1947(61 Stat 177; 16 U.S.C. 594-1 to 594-5)

Sec. 1. In order to protect and preserve forest resources of the United States from ravages of bark beetles, defoliators, blights, wilts, and other destructive forest insect pests and diseases, and thereby enhance the growth and maintenance of forests, promote the stability of forest-using industries and employment associated therewith, aid in fire control by reducing the menace created by dying and dead trees injured or killed by insects or disease, conserve forest cover on watersheds, and protect recreational and other values of forests, it shall be the policy of the Government of the United States independently and through cooperation with the governments of States, Territories, and possessions, and private timber owners to prevent, retard, control, suppress, or eradicate incipient, potential, or emergency outbreaks of destructive insects and diseases on, or threatening, all forest lands irrespective of ownership.

Sec. 2. The Secretary of Agriculture is authorized either directly or in cooperation with other departments of the Federal Government, with any State, Territory, or possession, organization, person, or public agency, subject to such conditions as he may deem necessary and using such funds as have been, or may hereafter be, made available for these purposes, to conduct surveys on any forest lands to detect and appraise infestations of forest insect pests and tree diseases, to determine the measures which should be applied on such lands, in order to prevent, retard, control, suppress, or eradicate incipient, threatening, potential, or emergency outbreaks of such insect or disease pests, and to plan, organize, direct, and carry out such measures as he may deem necessary to accomplish the objectives and purposes of this Act: Provided, That any operations planned to prevent, retard, control, or suppress insects or diseases on forest lands owned, controlled, or managed by other agencies of the Federal Government shall be conducted with the consent of the agency having jurisdiction over such land.

Sec. 3. The Secretary of Agriculture may, in his discretion and out of any money made available pursuant to this Act, make allocations to Federal agencies having jurisdiction over lands held or owned by the United States in such amounts as he may deem necessary to retard, control, suppress, or eradicate injurious insect pests or plant diseases affecting forests on said lands.

Sec. 4. No money appropriated to carry out the purposes of this Act shall be expended to prevent, retard, control, or suppress insect or disease pests on forest lands owned by persons, associations, corporations, States, Territories, possessions, or subdivisions thereof until such contributions toward the work as the Secretary may require have been made or agreed upon in the form of funds, services, materials, or otherwise.

Sec. 5. There are hereby authorized to be appropriated for the purposes of this Act such sums as the Congress may from time to time determine to be necessary. Any sums so appropriated shall be available for necessary expenses, including the employment of persons and means in the District of Columbia and elsewhere, printing and binding, and the purchase, maintenance, operation, and exchange of passenger-carrying vehicles; but such sums shall not be used to pay the cost or value of any property injured or destroyed. Materials and equipment necessary to control, suppress, or eradicate infestations of forest insects or tree diseases may be procured without regard to the provisions of section 3709 of the Revised Statutes (41 U.S.C. 5) under such procedures as may be prescribed by the Secretary of Agriculture, when deemed necessary in the public interest.

Sec. 6. The provisions of this Act are intended to supplement, and shall not be construed as limiting or repealing, existing legislation.

Sec. 7. This Act may be cited as the "Forest Pest Control Act."

Cooperative Forest Management Act
Act of August 25, 1950 (64 Stat. 473, as amended, 16 U.S.C. 568c, 568d)

Sec. 1. The Secretary of Agriculture is hereby authorized to cooperate with State Foresters or appropriate officials of the several States, Territories, and possessions for the purpose of encouraging the States, Territories, and possessions to provide technical services to private landowners, forest operators, wood processors, and public agencies, with respect to the multiple-use management and environmental protection and improvement of forest lands, the harvesting, marketing, and processing of forest products, and the protection, improvement, and establishment of trees and shrubs in urban areas, communities, and open spaces. All such technical services shall be provided in each State, Territory, or possession in accordance with a plan agreed upon in advance between the Secretary and the State Forester or appropriate official of the State, Territory, or possession. The provisions of this Act and the plan agreed upon for each State, Territory, or possession shall be carried out in such manner as to encourage the utilization of private agencies and individuals furnishing services of the type described in this section.

Sec. 2. There is hereby authorized to be appropriated annually, to enable the Secretary to carry out the provisions of this Act, the sum of $20,000,000. Apportionment among the participating States, administrative expenses in connection with cooperative action with such States, and the amount to be expended by the Secretary to make technical services available to private persons and agencies, shall be determined by the Secretary after consultation with a national advisory board of not less than five State Foresters or equivalent officials selected by a majority of State Foresters or equivalent officials of all States, Territories, or possessions participating in the program. The amount paid by the Federal Government to any State, Territory, or possession for cooperative action in the State, Territory, or possession shall not exceed during any fiscal year the amount expended by the cooperating State, Territory, or possession for the same purpose during the same fiscal year, and the Secretary of Agriculture is authorized to make such expenditures on the certificate of the appropriate official of the State, Territory, or possession that the expenditures as herein provided have

been made: Provided, That it is the intent of Congress that the Secretary may continue to cooperate with persons and private agencies in furnishing technical forestry services under existing authority.

Sec. 4. This Act shall be known as the Cooperative Forest Management Act.

Watershed Protection and Flood Prevention Act (P.L. 566) Act of August 4, 1954 (68 Stat. 666, as amended; 16 U.S.C. 1001-1008, 33 U.S.C. 701b (note)

Sec. 1. Erosion, floodwater, and sediment damages in the watersheds of the rivers and streams of the United States, causing loss of life and damage to property, constitute a menace to the national welfare; and it is the sense of Congress that the Federal Government should cooperate with States and their political subdivisions, soil or water conservation districts, flood prevention or control districts, and other local public agencies for the purpose of preventing such damages and of furthering the conservation, development, utilization, and disposal of water and thereby of preserving and protecting the Nation's land and water resources.

Agriculture Act of 1956
Act of May 28, 1956 (70 Stat. 207; 16 U.S.C. 568e)

Sec. 401. (a) The Congress finds and declares that building up and maintaining a level of timber growing stocks adequate to meet the Nation's domestic needs for a dependable future supply of industrial wood is essential to the public welfare and security; that assisting in improving and protecting the more than fifty million acres of idle non-Federal and Federal lands for this purpose would not only add to the economic strength of the Nation, but also bring increased public benefits from other values associated with forest cover; and that it is the policy of the Congress that the Secretary of Agriculture in order to encourage, promote, and assure fully adequate future resources of readily available timber should assist the States in undertaking needed programs of tree planting.

(b) Any State Forester or equivalent State official may submit to the Secretary of Agriculture a plan for forest land tree planting and station for the purpose of effecting the policy hereinbefore stated.

(c) When the Secretary of Agriculture has approved the plan, he is authorized and directed to assist the State in carrying out such plan, which assistance may include giving of advice and technical assistance and furnishing financial contributions: Provided, That, for the non-Federal forest land tree planting and reforestation, the financial contribution expended by the Federal Government during any fiscal year to assist the State to carry out the plan shall not exceed the amount expended by the State for the same purposes during the same fiscal year, and the Secretary of Agriculture is authorized to make financial contributions on the certificate of the State official in charge of the administration of the plan as to the amount of expenditures made by the State.

(d) In any plan that coordinates forest lands under the jurisdiction of any Federal agency other than the Department of Agriculture, the Secretary of Agriculture shall obtain the cooperation and assistance of the Federal agency having jurisdiction and the appropriate State Forester in the approval and carrying out of the plan.

(e) The Secretary of Agriculture may prescribe such rules and regulations as may be appropriate to carry out the purposes of this section.

(f) There are authorized to be appropriated such sums as may be necessary to carry out the objects of this section, such sums to remain available until expended.

Disaster Relief Act
Act of December 31, 1970 (84 Stat. 1744; P.L. 91-606)

Sec. 225. The President is authorized to provide assistance, including grants, to any State for the suppression of any fire on publicly or privately owned forest or grassland which threatens such destruction as would constitute a major disaster.

Rural Development Act of 1972 -- Rural Community Fire Protection Act of August 30, 1972 (P.L. 92-419; 86 Stat. 670)

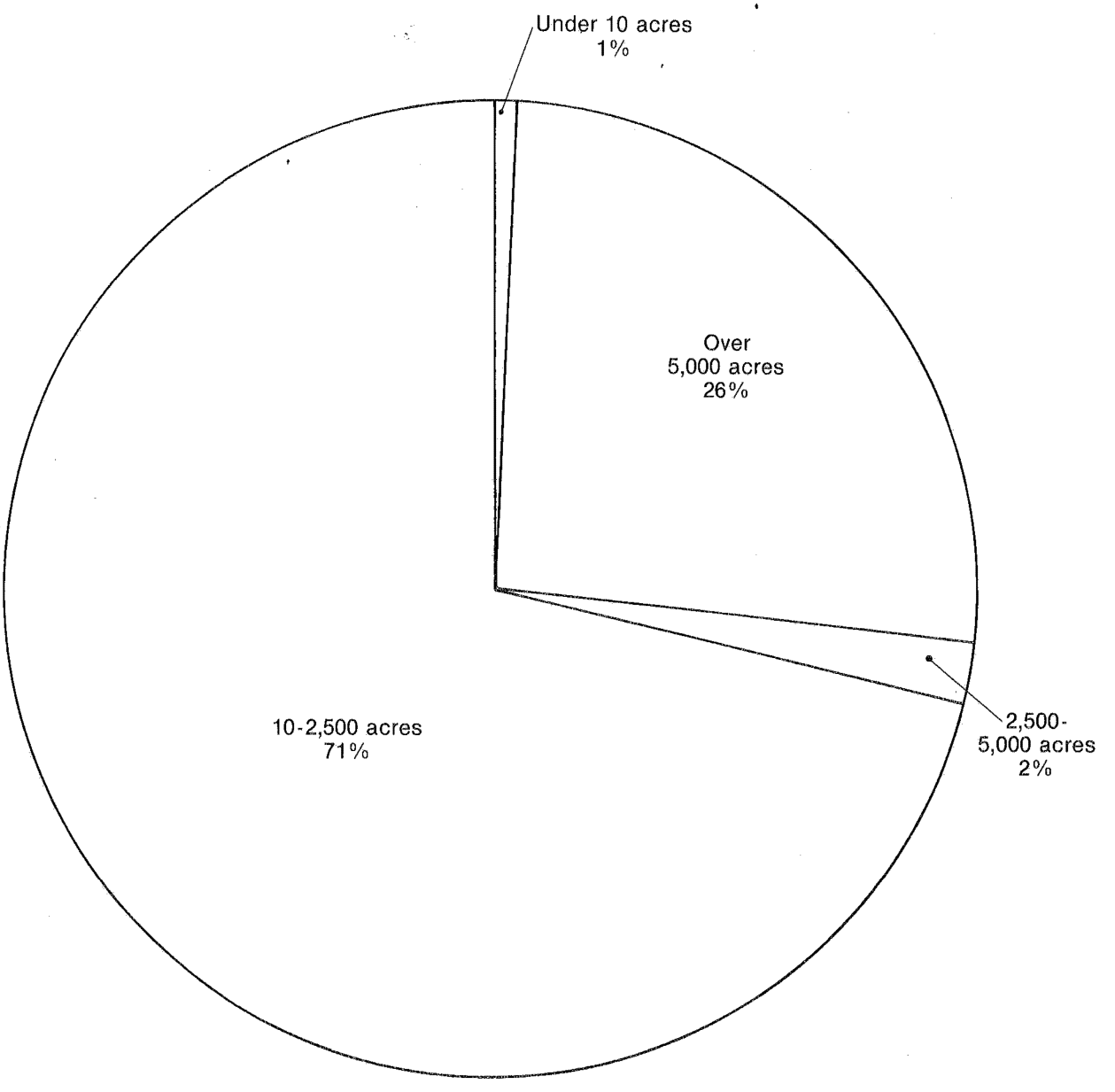
Sec. 401. WILDFIRE PROTECTION ASSISTANCE. In order to shield human and natural resources, financial investments and environmental quality from losses due to wildfires in unprotected or poorly protected rural areas there is a need to strengthen and synergize Federal, State, and local efforts to establish an adequate protection capability wherever the lives and property of Americans are endangered by wildfire in rural communities and areas. The Congress hereby finds that inadequate fire protection and the resultant threat of substantial losses of life and property is a significant deterrent to the investment of the labor and capital needed to help revitalize rural America, and that well-organized, equipped, and trained fire-fighting forces are needed in many rural areas to encourage and safeguard public and private investments in the improvement and development of areas of rural America where organized protection against losses from wildfire is lacking or inadequate. To this end, the Secretary of Agriculture is authorized and directed to provide financial, technical, and other assistance to State Foresters or other appropriate officials of the several States in cooperative efforts to organize, train, and equip local forces, including those of Indian tribes on Federal and State reservations or other federally recognized Indian tribal groups to prevent, control, and suppress wildfires threatening human life, livestock, wildlife, crops, pastures,rangeland, woodland, farmsteads, or other improvements, and other values in rural areas as defined in section 306 (a) (7) of the Consolidated Farm and Rural Development Act.

Sec. 402. MATCHING. The Secretary shall carry out this title in accordance with cooperative agreements, made with appropriate State officials, which include such terms and conditions as the Secretary deems necessary to achieve the purposes of this title. No such agreement shall provide for financial assistance by the Secretary under this title in any State during any fiscal year in excess of 50 per centum of the total budgeted expenditures or the actual expenditures, whichever is less, of the undertaking of such agreement for such year, including any expenditures of local public and private non-profit organizations, including Indian tribal groups, participating in the activities covered by the agreement. Payments by the Secretary under any such agreement may be made on the certificate of the appropriate State official that the expenditures provided for under such agreement have been made.

Sec. 403. REPORT. The Secretary of Agriculture shall submit to the President within two years after the date of enactment of this title a written report detailing the contribution of the rural fire protection program toward achieving the purposes of this title. The Secretary shall also include in such report such recommendations regarding the rural fire protection program as he deems appropriate. The President shall transmit the report to Congress for review and action.

Sec. 404. APPROPRIATIONS. There is authorized to be appropriated to carry out the provisions of this title $7,000,000 for each of the fiscal years ending June 30, 1973, June 30 1974, and June 30, 1975.

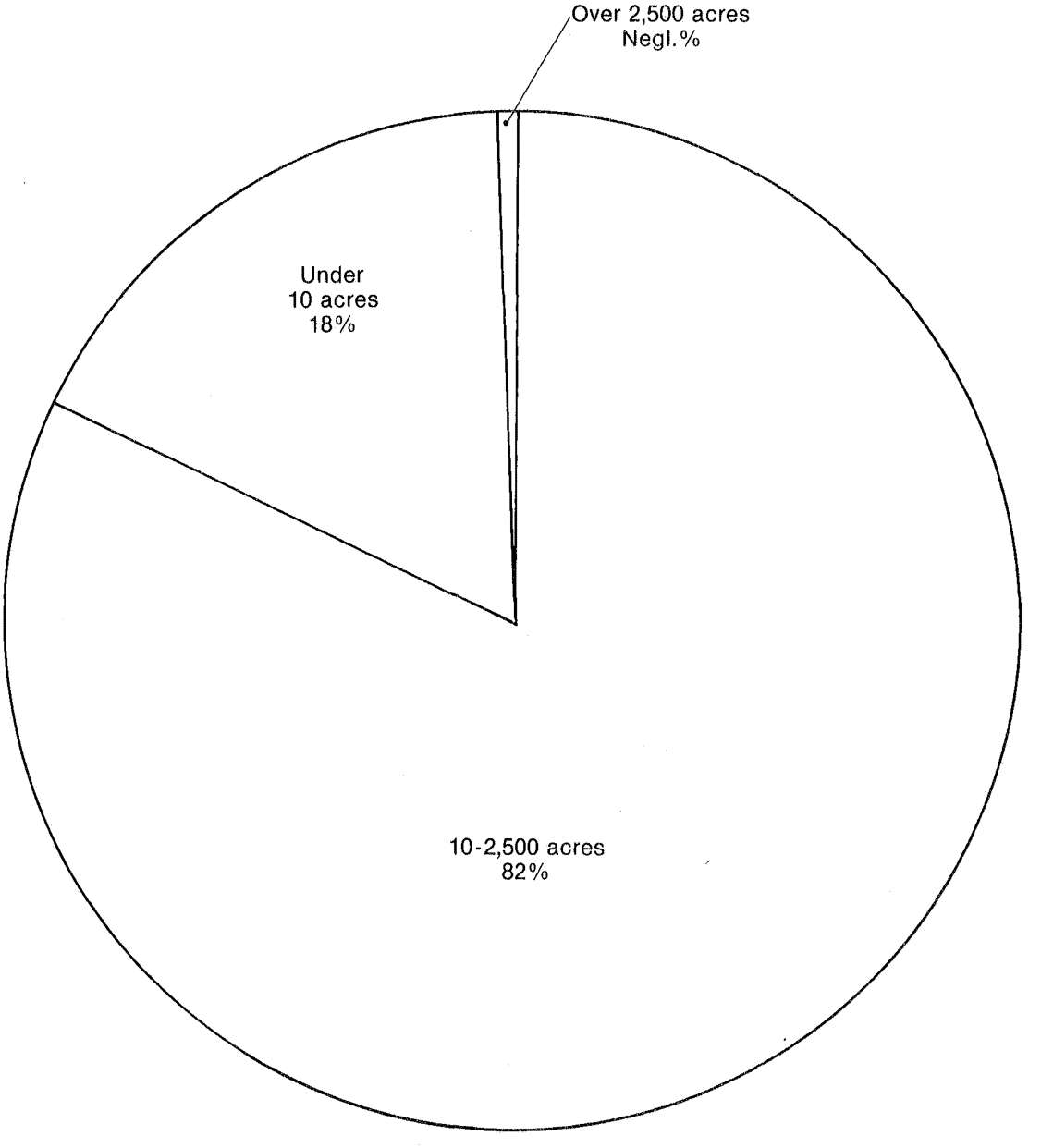
Area of Private Commercial Forest Land by Ownership Size Classes



Size Class	Million Acres
Under 10 acres	5.1
10-2,499 acres	252.5
2,500-4,999 acres	7.7
Over 5,000 acres	93.0
Total	358.3

Data from Forest Service Timber Resource Review 1958

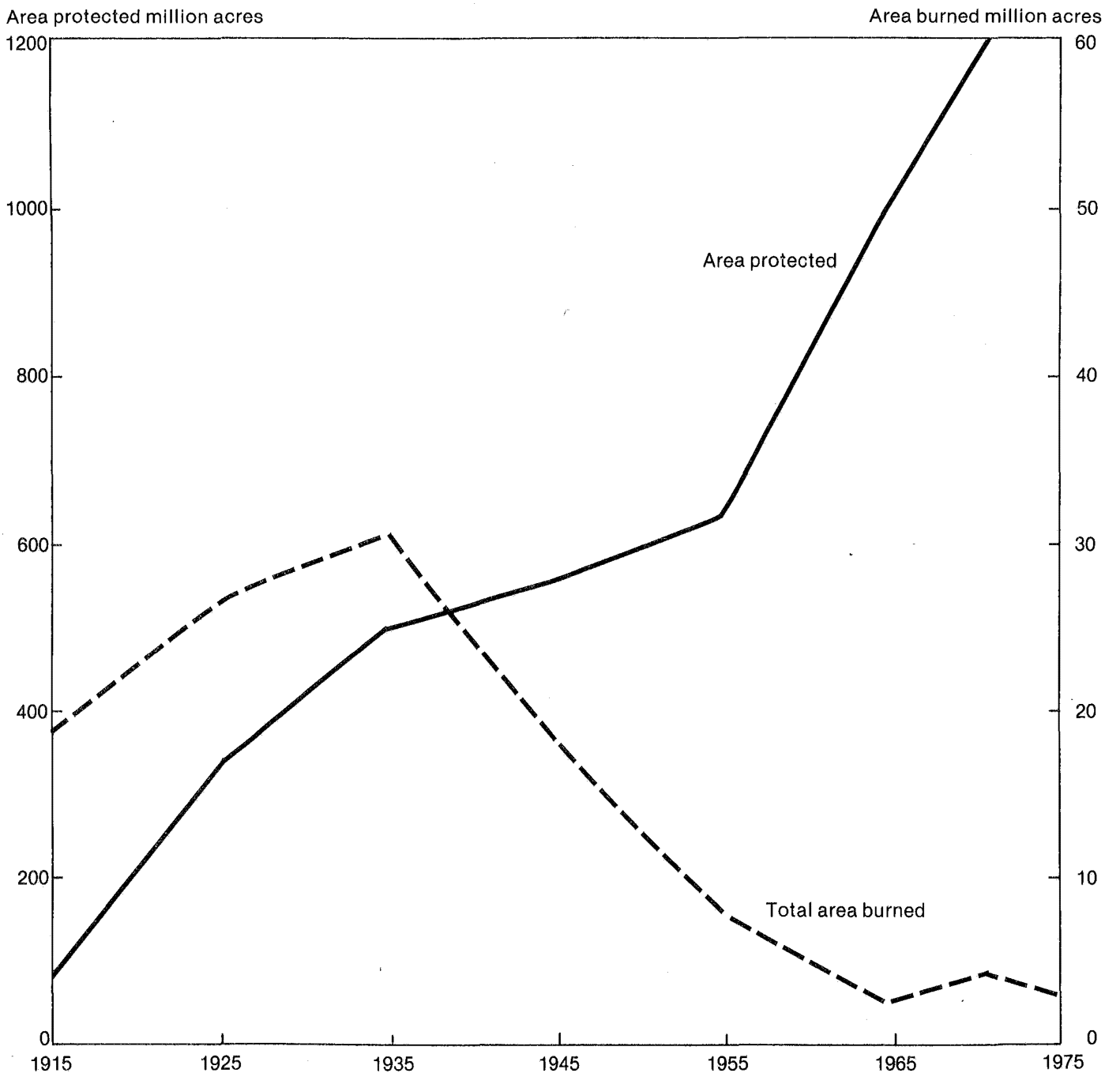
Number of Owners of Private Commercial Forest Land by Size Classes



Size Class	Thousand Owners
Under 10 acres	796.0
10-2,499 acres	3,707.0
2,500-4,999 acres	4.9
Over 5000 acres	2.8
Total	4,510.7

Data from Forest Service Timber Resource Review 1958.

Area Protected and Total Area Burned on Protected and Unprotected Lands in the United States



Source: CFFC Statistics.

☆U.S.GOVERNMENT PRINTING OFFICE:1989-241-854:00082/FS